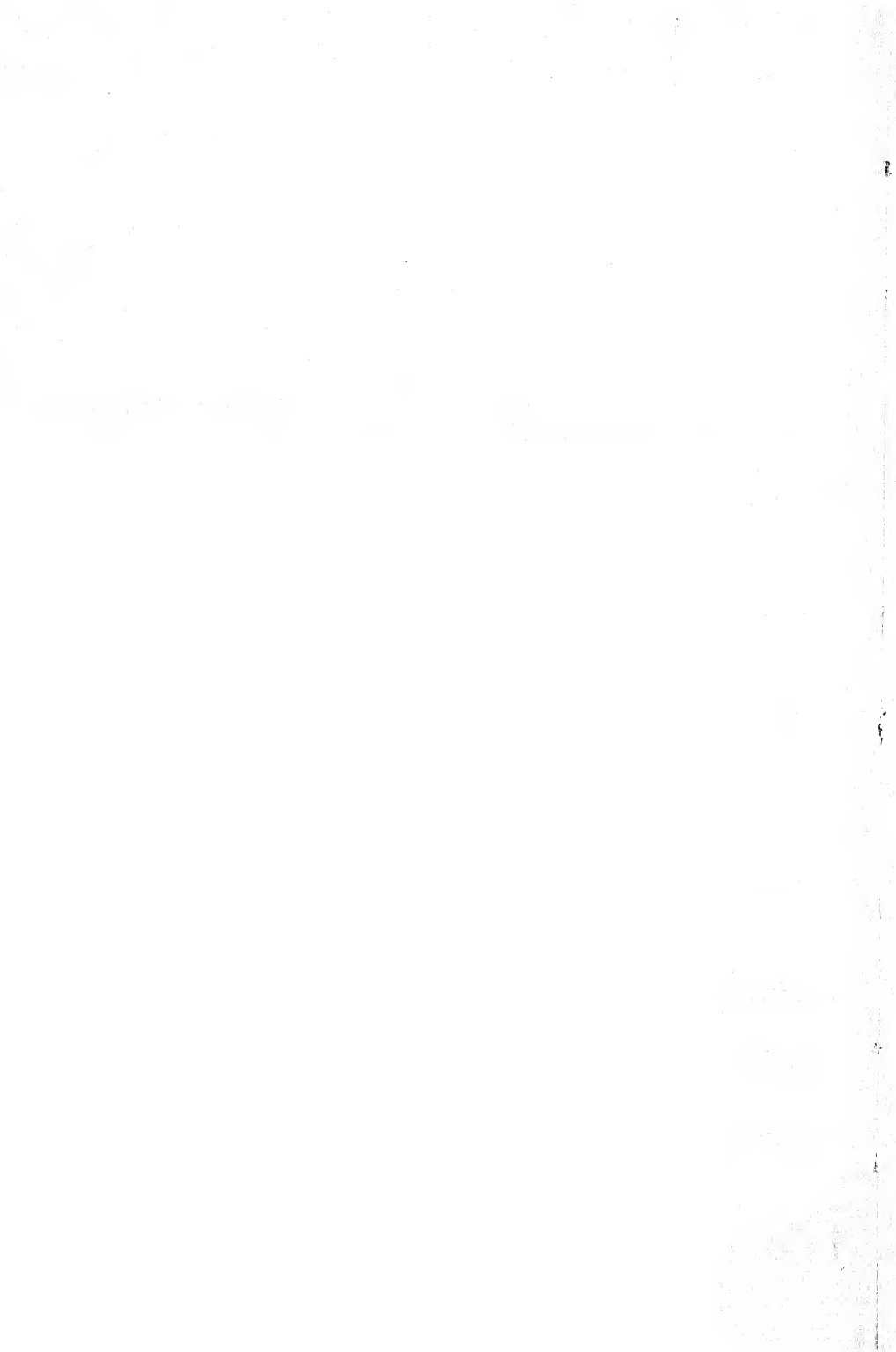


**INTEGRATED DEVELOPMENT OF SMALL
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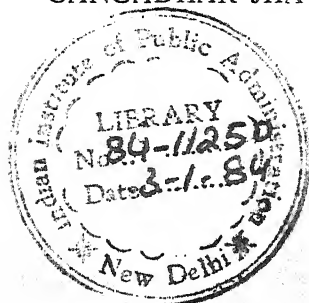
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Integrated Development of Small and Medium Towns

Problems and Strategic Policy Issues

*(Proceedings of the National Seminar held
at IIPA, New Delhi, March 18-19, 1982)*

Edited by
R.K. WISHWAKARMA
GANGADHAR JHA



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CENTRE FOR URBAN STUDIES
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NEW DELHI

1983

Price { INDIA : Rs. 120.00
ABROAD : £ 19.00 or \$ 38.00

Printed in India at Times Press, Darya Ganj, New Delhi.

FOREWORD

The Indian Institute of Public Administration has been trying to focus attention on the contemporary problems, plan programmes and policies including the administrative processes of national importance from time to time. The introduction of the scheme for the Integrated Development of Small and Medium Towns during the Sixth Plan as one of the centrally sponsored schemes is an important land-mark in the history of urban development. The programme is expected to have its wider ramifications in improving the quality of life in the hitherto neglected small and medium towns by creating more lovable and more livable surroundings for a more efficient stable economic life in continuity.

The Institute's Centre for Urban Studies, organised a high powered National Seminar to focus attention on various facets of this policy and the process of implementation devised to translate its avowed objectives. The seminar generated positive response from the planners, administrators, social scientists and a number of useful papers were contributed at the seminar. Because of the thematic value of the papers and the wealth of useful information generated during the deliberations of the seminar, we decided to publish both together so that it could provide a useful reference material for those interested in this programme and its implementation.

The present volume is an outcome of the seminar. Faculty members Sarvashri R.K. Wishwakarma and G. Jha, have taken pains in preparing the proceedings and editing the volume. I am glad to place on record my appreciation of their effort as well as of all those who contributed papers for the seminar.

It is hoped that the present volume would prove to be useful for the planners, administrators, academics and the

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students of urban development in India and would also lead to a useful dialogue for giving a positive direction to this programme.

A handwritten signature in black ink, appearing to read 'P.R. Dubhashi', is written over a solid horizontal line.

(P.R. DUBHASHI)

Director

INDIAN INSTITUTE OF
PUBLIC ADMINISTRATION

NEW DELHI
JULY 9, 1983

PREFACE

Public intervention for planned development in India's urban sector has been, by and large, confined to metropolitan centres and other large-size towns and cities. But the small and medium towns were left to develop and grow rather spontaneously on their own, though the role of these towns in reducing, if not altogether stopping, the rate of migration to the metropolitan cities, has been generally advocated time and again. Lately, however, these small towns have been brought within the ambit of planned urban development under the programme of integrated development of small and medium towns (IDSMT) conceived as a centrally sponsored scheme in the Sixth Five Year Plan. The IDSMT programme seemingly, has important ramifications for the distribution of population among different sizes of urban settlements as also for improving the quality of life in the hitherto neglected small and medium towns.

In view of the crucial importance of the programme, the IIPA's Centre for Urban Studies thought to have a detailed deliberation for considering various aspects of programme formulation, financing and execution including conceptual overtures of this programme in a congregation of academics, planners, administrators, and voluntary organisations. The result was a two-day National Seminar on the integrated development programme of small and medium towns.

Several useful papers dealing with various aspects of the IDSMT programme were contributed at this seminar and a wealth of information and ideas were generated out of the threadbare discussion of relevant issues involved in the programme. With a view to have a wider audience to the views expressed in the seminar, we decided to publish the papers and proceedings of the seminar. The present volume, is, thus, a modest outcome in this direction. Based on fruitful discus-

sion and dialogue on various facets of the IDSMT programme, *i.e.*, from project formulation to project administration and implementation, this volume fills up a major gap of complete dearth of literature on the subject. We have great pleasure in placing this elegantly compact yet admirably comprehensive volume before the public for further dialogue on the main currents of the programme. It is hoped that this volume would prove to be of immense use to planners, policy makers, administrators, academics, and the keen students of India's urbanisation.

A very large number of people, institutions and organisations have been involved in giving their constructive support and cooperation. We, therefore, take this opportunity to acknowledge their contribution and valuable support in making the seminar a success. We are thankful to the Union Ministry of Works and Housing for their cooperation in providing generous financial support for conducting the National Seminar and also for the printing of this volume. The Union Minister of Works and Housing Shri Bhishma Narain Singh and also the Union Deputy Minister Shri Braja Mohan Mohanty were immensely kind to us by associating themselves with the seminar, the former by condescending to inaugurate it and sending his good wishes and inaugural speech (as he could not come due to sudden exigency of work in Parliament, which he holds as an additional charge) and the latter for gracing the occasion and inaugurating the seminar.

The cooperation received from the UNICEF Middle and North India Office deserves all our appreciation for not only taking a keen interest in the seminar by sending their representatives but also by sponsoring some of the state delegates from Madhya Pradesh through their MP UNICEF office, Bhopal and also distributing the useful literature on "Community Action for Social Welfare" for the benefit of the seminar delegates. We would like to thank, in particular, Dr. W. Wong, Mr. E. Siliezar and Dr. R.C. Bhatnagar. We also express our sense of gratitude to Dr. William J. Cousins of the UNICEF Regional Office for South-East Asia for giving useful suggestions on the seminar design. We are also thankful to Shri Bindeshwar Pathak, Chairman, Sulabh International, who was kind enough to send his representatives.

and distributed valuable publication relating to the pioneering work of Sulabh Shauchalaya.

The organisation and success of the seminar, to a large extent, depend on the institutional and administrative support and cooperation of people. We are proud of having received the overwhelming support from the participants and their sponsoring authorities. We are thankful to them for their active participation in the deliberations of the seminar and also to all those who contributed to the valuable discussion and the theme papers.

We wish to place on record our deep sense of gratitude and appreciation of the Chairmen of various technical sessions, namely, Shri M.K. Mukherji, Secretary to the Government of India, Ministry of Works and Housing, Shri P.R. Dubhashi, Director, IIPA, Shri C.S. Chandrasekhara, former Chief Planner, Town and Country Planning Organisation and now Hony. Adviser to the National Institute of Urban Affairs, and Shri S.K. Sharma, Secretary to the Government of Madhya Pradesh, Department of Housing and Environment, for having kindly agreed to chair and bear the burden of an arduous task.

We are equally grateful to the group of rapporteurs for bearing the burden of recording the various viewpoints during the deliberations. Sarvashri T.S. Papola, E. Siliezar, R.L. Pitale, V.N. Misra (for the first session); Kirtee Shah, Mathew Varghese, P.T. Hardikar, R.L. Dewan, P.K.S. Nair for the second session and K.L. Julka, Akbar Ali Khan, Diwakar S. Meshram and Mrs. Vijay Laxami Pandit (for the third session) contributed substantially in arriving at the major outcome and conclusions of the seminar. In particular, we are indebted to Dr. T.S. Papola, Shri Kirtee Shah and Dr. K.L. Julka for presenting the concluding observations having far reaching policy implications.

We owe a great deal to our Director Shri P.R. Dubhashi for inspiring us at every stage of organising the National Seminar and taking a keen interest to make it a success. He has been our sole motive force for planning and conducting the seminar on such a large scale and also for the publication of its papers and proceedings for a wider audience and circulation.

We shall be failing in our duty, if we do not recognise the sincerity of effort and initiative taken by Shri P.S.A. Sundaram, Director (UD) and Shri Satish Kumar the then Research Officer in the Ministry of Works and Housing for considering our request, as and when we approached them.

Our Institute's Office of Academic Activity has been the mainspring of the seminar in providing excellent support services. We are, therefore, thankful to all those involved and particularly to S/Shri Ramakrishna and Bhim Sen Khurana for ensuring the supply of required documents and to Shri G.S. Negi for nicely cutting the stencils. The cooperation received from Shri N.R. Gopalakrishna of the publication division in printing the seminar documents at such a short notice equally deserves our appreciation.

The sincere cooperation received from Dr. O.P. Sharma and Shri H.B. Pandey in recording the proceedings of the seminar has been an immensely useful contribution in finalising the proceedings. We are sincerely, grateful for their invisible enthusiastic support and to Miss Kushal Sharma for rendering assistance during the course of the seminar.

Lastly, we wish to thank Mrs. Vimla Soni and Mrs. Kamlesh Chopra for providing secretarial assistance in typing and stencilling the manuscript written in a rather clumsy hand.

NEW DELHI
OCTOBER 25, 1982

R.K. WISHWAKARMA
GANGADHAR JHA

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WELCOME ADDRESS

P.R. DUBHASHI*

Friends, on behalf of the Indian Institute of Public Administration, I feel very happy to extend a very warm welcome to all of you to this National Seminar on Integrated Development of Small and Medium Towns.

I am particularly grateful to the Union Deputy Minister for Works and Housing, Shri B.M. Mohanty, for having found time to come here to inaugurate the Seminar. As you all know, the Seminar was to be inaugurated by the Union Minister for Works and Housing Shri Bhishma Narain Singh. As the Parliament is in session, he has heavy pressure of work and expressed his inability to come here to this Institute to inaugurate the Seminar. But we are very grateful to the Union Deputy Minister that he has come here to inaugurate the Seminar. On your behalf, and on behalf of the Institute, let me offer him our gratefulness for his presence here.

This National Seminar on Integrated Development of Small and Medium Towns being held at this Institute is of particular significance in the context of the scheme for integrated development of small and medium towns enunciated in the Sixth Five Year Plan. This, indeed, signifies a very important step in the process of planning in our country. Ever since we embarked on planning in the year 1951, it has been mainly sectoral rather than spatial in character. In other words, the plan all along had been endeavouring to promote sectoral development, *i.e.*, development of agriculture, industry, transport and so on rather than regional development in terms of spatial distribution of economic growth activities. Perhaps, as a result of the neglect of the spatial aspects of planning, it has been now realised that it has led to apoplexy at the centre

*Director, Indian Institute of Public Administration, New Delhi.

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and anaemia at the periphery. It has led to, what the Sixth Plan has called, an unhealthy process of urban development with the metropolitan centres bursting at the seams. As a consequence of this imbalanced spatial growth in our country we have to pay social costs of various sorts in terms of human sufferings in the urban sector, in terms of the growth of slums and shanties, in terms of unbearable burden on the infrastructural facilities in the cities, be it transport, water supply, or environmental hygiene. It has further led to serious social consequences which have manifested themselves in the shape of organised crime and the time has come for the nation to seriously look into the consequences emanating from the maldistribution of economic growth over space. It is this, which has led to a fresh thinking in the minds of planners and policy-makers in our country.

Now, this unbalanced urban growth has almost become some kind of a natural phenomenon leading to the agglomerating tendencies in the economic system. The greater the metropolitan centre, the greater is its pull effect. On the other hand, the smaller the town, the lesser is its pull effect. If we are to deal with the problem of imbalances in growth, it is this inherent tendency in the working of the economic system that has to be countermanded. For this the strategy of development has to be based on integrated development in many senses of the term.

First, it has to be an integration of macro-planning and micro-planning. We cannot look upon cities and towns as isolated units; they are embedded in the economic and social system as a whole and unless we deal with the macro tendencies in the socio-economic system, we will not be able to deal with the micro-problem of uneven urban growth.

Secondly, the strategy has to be integrated in the sense that we do not just have a physical approach to social forces. We must deal with the forces through social and economic approach to development so that development becomes integrated automatically. To tackle the problem of integrated development, we will have to bring to bear the insight of economists, sociologists, administrators no less than that of the town-planners and architects.

Thirdly, the attitude and approach have to be integrated

so that development can come about not merely through the administrative agency or administrative action but is supplemented by popular participation and popular acceptance.

So in dealing with the problems of imbalances in spatial growth in an integrated manner, we will have to integrate the economic and sociological approach with the physical and administrative approach, macro-planning with micro-planning and administrative action with the community aspirations in the larger sense of the term.

It is to deal with these problems and issues that this Seminar has been organised. The Sixth Five Year Plan's scheme of integrated development of small and medium towns has already been introduced. Proposals have already been formulated and we have gone ahead with implementation. But a review of the progress made in the programme by the Union Ministry of Works and Housing placed before the 19th meeting of the Central Council of Local Self-Government and Urban Development reveals that only 155 projects with a total cost of Rs. 113.76 crores have been sanctioned so far in different states and union territories and a sum of Rs. 14.14 crores of central assistance has been released as the first instalment. Sufficient project proposals have not been received from some states and union territories, and many of them have yet to make a beginning. This is the quantum of progress of IDSMT programme from 1980 to January 1982. Taking note of the slow progress, the Central Council of Local Self-Government and Urban Development in their 18th Meeting resolved that effective steps be taken for the development of the towns identified under the scheme.

The slow progress of the scheme, as emerging from the review could be attributed to a number of gaps and inadequacies, viz.: (1) lack of conceptual integration in project formulation, (2) delay in the selection of the project areas, (3) inertness of states to provide matching grants, (4) lack of urban information base and advisory services, (5) communication gap between the centre and states in monitoring the programme, (6) inadequacy of matching grant to supplement the existing resources, (7) incapacity of certain local bodies to digest even these marginal resources, (8) shortcomings in

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the project formulation by not adhering to the guidelines, and finally (9) lack of human focus on development.

If we have to deal adequately with the problems of implementation, we have to formulate the concept and the approach to deal with these problems. I believe that this seminar, which has brought together people belonging to various disciplines, will bring to bear this kind of an integrated outlook on a topic, which is of profound national importance in the years to come. Considering the importance of the programme, we had earlier organised a small workshop on Integrated Development of Small and Medium Towns at this Institute during July 1981. It proved to be fruitful. Its proceedings have since been published and I thought it proper to get it released on this auspicious occasion.

I am very happy to note that the Secretary, Union Ministry of Works and Housing, Shri M.K. Mukherji, himself has found time to come here and be with us for the inaugural session and the first business session. I am grateful to him, to all of you who have responded to our invitation to participate in this Seminar, and we all would be looking forward to a very fruitful and constructive discussion on the various problems and issues related to the theme of the Seminar.

Once again I would extend a very warm welcome to the Chief Guest and would request him first to release this little booklet on "Integrated Development of Small and Medium Towns: Critical Areas and Issues for Policy Options" and then, after the presentation of the Issues and Objectives of the Seminar by Shri R.K. Wishwakarma, kindly inaugurate the Seminar. ☐

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: ISSUES AND OBJECTIVES

R.K. WISHWAKARMA*

Hon'ble Deputy Minister, Secretary, Union Ministry of Works and Housing, Director, Indian Institute of Public Administration and distinguished delegates, ladies and gentlemen,

Before I come to the major issues and objectives of the Seminar on Integrated Development of Small and Medium Towns, I would like to touch upon the environmental context of the origin of this programme. In the community the world over, especially in the past one decade, the objective of development has undergone a sea-change. National development which used to be thought of in terms of economic progress, has brought not just the benefit of a rise in national income but many a fresh problem, neutralising the benefits of growth. This is seen glaringly in the demographic upsurge, migration to cities, shortage of housing, the problems of slums and squatters, urban poor, and poor living environment, health and sanitation. Economic growth was not rapid enough to cope with the growing problems of a large mass of humanity. Public investment became exceedingly inadequate, the services and amenities scanty, and the growth of slums and squatters unmanageable.

The road to prosperity at this crucial juncture culminated and took a turn to show that economic development is not always accompanied by social development. This was also the reason for the failure of the first United Nations Development Decade. As a result, the Economic and Social Council of the United Nations adopted a resolution in May 1970 on 'integrated' (unified) approach to development as a total societal process. It was endorsed by the General Assembly in December 1970.

*Seminar Director.

This digression in the philosophy of development from quantitative economic growth to qualitative development, was concretised, at the first ever held United Nations World Conference on Human Environment at Stockholm (1972) which was addressed by our Prime Minister Smt. Indira Gandhi, who made the perceptive observation on 'environment' and 'social justice' as two new facets of development strategy.

Although these values of 'environment' and 'social justice' are enshrined in the Directive Principles of State Policy in our constitution, their weightage in the formulation of plan policies and programmes got momentum only during the Fifth and Sixth Five Year Plans, particularly in the minimum needs programme and the integrated development programme. As a more radical and comprehensive measure, his approach which started from integrated development of metropolitan cities to integrated development of small and medium towns, did not show any encouraging result. The reasons why the programme did not gain momentum are, in themselves, an issue for consideration.

Integrated development requires new approaches in the methods of urban development including changes in the current status and methodology of urban planning and new modes of popular participation, including changes in the power structure that controls decision making. The plan, programmes and policies affecting the mechanics of living have to be integrated with a focus on a common set of objectives and a common approach to development. The great social philosopher, Dr. S. Radhakrishnan, in his inaugural address at the Sixth Tribal Welfare Conference at Ootacamund in May 1960 said: "In any social set-up, we have to make a distinction between the mechanics of living and art of living." Long long ago Aristotle said: "We must live before we can live well." The mechanics of living concerns the condition of human and material life. The art of living relates to art of spiritual life, form of worship, dance and song, but all these concepts of life, spiritual, cultural and artistic, cannot go in a vacuum. It is essential, therefore, that we must provide the essential conditions of life.

Since 'ends' and 'means' of development are people and

their quality of life, the essence of integrated development strategy lies in *operational explorations* and 'linkages' established while conceptualising the formulation of a plan. This is the most important issue of integration. To make the programme more effective in its very intent and spirit, the issue of integration has to be conceived explicitly, based on development priorities of the town, in terms of *integration of different goals and objectives* directed to improve the quality of life of all people, beginning with the satisfaction of the basic needs of healthy living with dignity and social security. This again requires *integration of sectors and a wide variety* of sectoral components of adequate food, shelter, income and employment generation and package of services like health, education, water supply, environmental sanitation including disposal of solid wastes, family limitation and protection against communicable diseases and aspects of prevention, that are more cost-effective than the cure of diseases itself. This again requires *multilevel inter-sectoral convergence of services and their integration over space* for all sections of population, particularly the most vulnerable, namely, the urban poor, the physically handicapped, women and children.

It is worth mentioning here that during the past 31 years, the government has initiated a number of policies, plans and programmes. India is one of the few countries that has a framework of national policies for children, population and health, directly relevant to the welfare of mankind in general and children and women, in particular. What is lacking is their effective integration at the grassroot level of implementation. Partial efforts have been made in the past to inject the values and norms of integrated development in the housing projects for the urban poor in the cities of Ahmedabad and Hyderabad. In the latter case, integrated development was attempted with community approach in terms of: (1) integrating physical infrastructure and services with improved housing within the community, (2) linking voluntary organisations with the slum community, and (3) the slum community with the informal sector of the economy.

The essence of integrated development lies neither in co-ordination which has ceased to be a 'control' problem in economic management nor in too much emphasis on acquisi-

tion and development of land. Land is important but comes as one of the ingredients to the whole strategy of integrated development, it is not the pace setter. Therefore, the planners responsible for preparing integrated development plans should develop a greater understanding of the structural aspects of urban poverty such as slums and squatters, unhygienic environment and ecological deterioration through overcrowding and lack of basic services and facilities including exploitation of nature and its resources.

Integrated development programme is an action-oriented programme. It does not require elaborate plans to increase the ratio between resources and results. To make the programme more effective, the integration of shelter, services and infrastructure is necessary, in terms of the following:

- (a) a single package with a view to minimising potential contradictions and trade-offs within and among multiple objectives and using the achievement of each objective to further the cause of others;
- (b) all the objectives must be given appropriate priority and pursued simultaneously; and
- (c) these objectives must be used as the criteria for development performance and evaluation of results.

The strategy needs an element of dynamism by the most efficient use of resources and additional inputs. This could be done by using management techniques, knowledge and wisdom including experience in action-research, quite different from experience in desk-research. Above all, the most important is the 'will and an open and nimble mind' to convert additions to 'economic resources into multiplier of human benefits'. This is an important issue and it means how best we can involve the community and create an environment of administrative and political culture to enhance confidence and awareness among the people. Once this question is settled in favour of community participation in decision-making, we face another major issue, that of reconciling participatory democracy with rational management procedures and professional expertise. Today, we have just the reverse of it.

In a participatory democracy, the most important issue is

to create political environment to facilitate policy administration and decision-making process. The political environment that we have in the small and medium towns (and cities) of India is generally self-seeking. Too much politics is injected into urban development. The urban polity is neither committed nor development-minded and acts as a 'broker' in decision-making. They in the urban areas work against the philosophy of selflessness enshrined in Geeta, in the battle of development. And they have forgotten the mission of selflessness proclaimed by their great political Guru, Lord Krishna.

Shortsighted politics is self-defeating, it is like a self-sharpening knife which finds the means of making each of its disadvantages reinforce the other. It is my submission that for the cause of development and human progress, all political parties should commit their active cadres to the policies of the government. Administrative structure and processes should provide for access to decision-making in such a way that peoples' representation with the necessary individual groups is reflected in policy administration.

OBJECTIVES

In view of the issues raised above, this Seminar outlines a 10-point programme to be discussed here:

1. To review the progress and problems of programme administration.
2. To conceptualise integration in project formulation as an 'operational' concept in terms of multi-objectives, multi-sectors and multi-levels for an integrated package area development programme.
3. To explore the mechanics of inter-sectoral integration at the local level.
4. To increase employment and raise productivity with the satisfaction of basic human needs, the 'economic inputs' have to be reinforced by 'social inputs'.
5. To revitalise the informal sector of small and medium towns.
6. To explore the possibilities of enhancing and strength-

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ening public relations in environmental sanitation including management of solid wastes.

7. To enhance and manage financial and human resources with a view to increasing the capability, confidence and awareness in the beneficiary.
8. To evoke community participation to combat the ills of politics of urban development.
9. To create a political culture to facilitate policy administration and decision-making.
10. To suggest a suitable model of organisational framework for integrated development.

I am sure these 'issues' and 'objectives' will receive careful attention under your dynamic leadership and direction which will help us to crystallise some of the ideas which may break new ground for the successful deliberations of the Seminar. Once again, I thank you, Sir, for gracing the occasion and releasing my book*. I also thank our distinguished delegates and friends who have made the Seminar possible. With these words, I request you, Sir, to kindly inaugurate the Seminar. □

*R.K. Wishwakarma (ed.), *Integrated Development of Small and Medium Towns: Critical Areas and Issues for Policy Options*, New Delhi, Centre for Urban Studies, IIPA, March, 1982.

INAUGURAL MESSAGE

BHISHMA NARAIN SINGH*

Shri Dubhashi, Shri Mukharji, esteemed delegates to the seminar and friends,

It would have been my great pleasure to have inaugurated the National Seminar on "Integrated Development of Small and Medium Towns" organised by the IIPA's Centre for Urban Studies but for more urgent work in Parliament in session, I am unable to attend this domestic function. It is a domestic function because I happen to be the Chairman of the Advisory Committee of the Centre for Urban Studies and the subject of discussion is also a scheme administered by my ministry. I am happy, however, that the seminar has been arranged at an opportune moment when we are ourselves making efforts to understand the dimension of the problem facing the small and medium towns.

The thrust of the urbanisation policy during the Sixth Five Year Plan is to give greater emphasis to the provision of adequate infrastructural and other facilities in the small and medium as well as intermediate towns which have been neglected so far. The aim would be to strengthen these towns in order to equip them to subserve as growth and service centres for rural hinterland and also to reduce the rate of migration to the larger cities. This will be dovetailed with the provision of positive incentives for setting up new industries and other commercial and professional establishments in these towns, taking advantage of the particular special conditions available in each place. Recognising the great pressure on the available facilities in the large cities, the government has already taken a number of steps to decentralise industrial and other activities away from these cities and to improve the capacity

*Minister for Parliamentary Affairs and Works and Housing, Government of India, New Delhi.

of the smaller urban areas for accommodating these activities. Thus, the government's emphasis on the development of the smaller urban areas is in tune with the overall policy of location of economic activities and also consistent with the requirements of balanced and orderly urbanisation.

It was in this context that the scheme for the development of small and medium towns was introduced in the central sector in December 1979 considering the fact that there were as many as 2386 urban agglomerations with population less than 1 lakh as per 1971 census, it would have been impossible from the financial and organisational point of view to attempt to take up the development of these towns. The effort was basically to develop a strategy for the development of these towns which could be evaluated during the Sixth Plan period and could provide the basis for replication and large scale implementation during the successive five year plans in the light of actual experience. It has, therefore, been decided to undertake the integrated development of 231 small and medium towns with the population less than 1 lakh by March 1985. As you are all aware that the centrally sponsored scheme covers towns with the population less than 1 lakh according to 1971 census, we have adopted a rational criteria for distribution of towns amongst different states and union territories, namely, the proportion which the urban population bears to the total urban population of the country in 1971. Given the actual selection of towns, we have kept the regional context in view and the state governments have been asked to pay attention to the rate of growth of the population of towns, the growth of the district and the region, investment taking place in the hinterland and the linkage of employment generating activities with the requirement of physical infrastructure. The project has been described as integrated for two reasons. Firstly, it seeks to take comprehensive view of all investment taking place in the towns in the physical and social sectors and also seeks to unite the activities of different central and state and local agencies in the towns under a single umbrella. Secondly, it also seeks to provide a regional focus to what hitherto has been considered as purely civic function covering the activities like water supply and sanitation. That is why, even though, the central government is support-

ing the activities such as housing, economic activities, traffic and transportation, the state governments are required to prepare integrated project covering other investments in sectors such as water supply and sanitation, slum improvement, health and recreation.

We have so far been able to sanction 173 projects distributed over all the states and union territories and a sum of about Rs. 17.61 crores has been released as loan assistance. Admittedly the progress of the scheme has been somewhat slow and has not been speedy as I would like it to be. However, one must appreciate that this is a new scheme being implemented by local bodies without much resources by way of finance or technical staff or planning experts. It also requires the coordination of a number of agencies at local and state levels. In the course of a review conducted recently by my ministry, we have identified some of the problems coming in the way of effective implementation of the scheme. These include the absence of clear-cut responsibility for the urban development and local government functions in state governments, shortcoming in the preparation of project reports, failure to identify agencies at state and local levels for formulation and execution of schemes, difficulties in making adequate budgetary provision in the state and local budgets, and various types of implementation problems. I have discussed these difficulties with the ministers in charge of urban development and local government in the states and union territories in the course of meetings of the Central Council of Urban Development and Local Self-Government convened by me in December, 1980 and February, 1982. Officers of my ministry have also been visiting the states periodically to sort out the difficulties facing them. I am hopeful that with increasing understanding of the nature of the scheme to be undertaken and the ways in which the difficulties can be overcome, the scheme would register much greater progress in the remaining years of the Sixth Five Year Plan and different states would be able to achieve physical targets substantially.

I wish to quote for your benefit the observations made by the Prime Minister in the course of an address to the

state urban development ministers:

The increasing pace of urbanisation in the country compels attention and perhaps demands a fresh response from us. Hitherto, the problems of the major metropolitan centres alone have come in for consideration in depth. But the larger part of the urban population is to be found in small cities and towns. As the quality of life in the smaller towns declines, they become less capable of exerting a counter-pull to the metropolis and thus mitigating the problem of metropolitan congestion. It is possible to arrest the process of decay by intelligent planning and anticipation.

You will agree that this reflects the full concern of the government for proper development of small and medium towns in the country. I hope the deliberations in this Seminar would lead to concrete suggestions to the government for better implementation of the scheme for the development of small and medium towns. I wish the Seminar all success. □

INAUGURAL ADDRESS

BRAJA MOHAN MOHANTY*

Mr. Dubhashi, Mr. Mukherjee, distinguished delegates of the Seminar and friends,

At the outset, I would like to convey to you the message given by the Hon'ble Minister of Works and Housing. Because of his preoccupation with some urgent work, it could not be possible for him to inaugurate this Seminar. He, therefore, specially asked me to convey his best wishes to you for the commendable work that you have been doing and also for the success of the Seminar.

Friends, the Hon'ble Minister's 'inaugural message' has been given to you. That 'message' has outlined the approach of the government with regard to the problems which you would be deliberating. I think, I should not try to read out that message, since it has already been circulated.

The basic problem that the Indian democracy is confronted with, is how to promote the planned development of our nation. India is the only democratic country which has taken the initiative in the field of planned development. In socialist countries, the question of freedom is not under consideration. Therefore, so far as urban development is concerned, the problem has been tried to be solved by issuing directive that no body from the rural areas will be allowed to migrate to the cities and towns. In China, in the Soviet Union, in fact everywhere in the socialist world, migration is a reverse process, i.e., from urban areas to rural areas. But we cannot approach the problem in the same way. We have made special commitments in our constitution. The nation is committed to basic freedom enshrined in our constitution. Article 19 of our constitution categorically guarantees

*Deputy Minister for Works and Housing, Government of India, New Delhi.

freedom of movement and freedom of speech. These are the fundamental rights of our people which cannot be interfered with. We have to appreciate the problems before us in this background.

But planned development requires certain restraint to be put on the movement of the community in various fields. This generates conflict in our democratic system. The state is putting some restraint, the citizens are resisting it and, ultimately, the court is arbitrating it. That is the area of conflict. So we must be conscious of the nature or aspect of the problem.

The earlier speakers have referred to the sociological considerations in development programme. I would say that it is not only a politico-sociological problem, it is a cultural one as well. The government alone cannot be expected to be primarily concerned with development; it requires the participation of people in the development programme. That is why I submit that it is more a cultural problem which is not to be considered only from an administrative, political, economic and technical angles alone. My submission, therefore, would be that those who are associated with the development programme should not forget to educate the people and create a cultural atmosphere in the country for promoting the cult for our developmental programme. There has to be an urge of serving the country.

There is a large scale migration from rural areas to urban areas and metropolitan cities because of many advantages available there. The avenues of life available there are quite open and wide. So, there is a natural tendency to migrate to such areas. Therefore, our attempt should be not merely to minimise the rural migration but also to reduce the gap between rural and urban areas. That should be the ultimate aim. The amenities available in the cities or urban areas ought to be made available in the rural areas to the extent possible. That is the only way in which we can put a check on the tendency of the people to migrate. In order to provide opportunities of gainful employment to the manpower that we have in the country, it would be desirable to develop partially the tertiary sector so that the excess of manpower can be absorbed there. The tertiary sector is

especially advantageous as India is basically a country where capital is scarce and labour is abundant. The tertiary sector is, therefore, best suited for labour intensive activities. With increasing accent on professionalisation, specialisation and modernisation, things which used to be done with hired people in a hierarchical manner get systematised and the tertiary sector, therefore, develops automatically out of this process of specialisation. If we look into the history of developed countries, we find that the increasing specialisation has been resulting in the growth of the tertiary sector. So, to some extent, the growth of tertiary sector follows urbanization and modernisation.

As ultimately the proportion of population depending on agriculture has to come down, there has to be a shift from rural to urban population. Therefore, if the small and medium towns are developed by strengthening of their economic base, these could serve as alternative centres of prospective employment opportunities. To this end in view, we are starting with a small programme that has been outlined in the Hon'ble Minister's speech.

I also take the opportunity of the Prime Minister's concern about ecological imbalance and the environmental decay and her wish to restore it. But the fact remains that unless we are able to create the cultural atmosphere for that, we will not succeed in our endeavour. We know that once upon a time our ancestors used to consider nature as our friend. But now we never seem to consider nature as their friend. Our ancestors educated their wards even to worship nature. This cultural tradition of accepting worshipping and adoring nature as a friend, philosopher and guide was being inherited from generation to generation for a longer period in our glorious past. But unfortunately, after the advent of the industrial revolution and the impact of science and technology, we started raising doubts about our old values and attitudes towards life and started aping the western society. We were highly influenced with western values so much so that we even started creating literature in support of that and even our art was also accordingly moulded to that end.

Our present problem is, therefore, to rebuild that cultural background, rebuild the cultural ethos amongst the commu-

nity all over the country so that we can achieve environmental harmony and ecological balance for creating better living conditions in the country.

In this conference you are all experienced people who have contributed a lot for the development of our country. You should remember that our problem is not merely the problems which have been outlined here by the ministry, but also educating the people about the cultural harmony in the country so that we can achieve our objective. With this, I have a great pleasure in inaugurating this Seminar.

I wish you all success once again. Thank you very much.



PART I

DELIBERATIONS AND PROCEEDINGS

1

INTRODUCTION

In many developing countries all over the world, there has been a shift in the urbanisation policy from growth pole strategies to exploring the service functions of small and medium towns in the context of urban and regional development. Since regional choices cannot be made independently without considering the urban problems, the latter have to be decisive considering the structuring of regional space through a hierarchy of urban and rural settlements. The pattern of population distribution and spatial density are imaginary concepts without any qualitative implications. Regional distribution of population has its definite correlation with available resources, conditions of life and the available means of communication and transportation. Although these aspects may not have urban connotations, they do definitely operate in the region and have regional implications.

This seems to be one of the reasons why the development of small and medium towns has been added with a prefix 'integrated'. It is entirely a different issue as to how one deals with the question of urban and regional development, probably physical planning is no longer an adequate concept unless it deals with broader policy issues of urbanisation in the larger context of the general process of economic development.

It is in the context of these issues that the government has been adding, time and again, new dimensions to social and economic planning, for improving the socio-economic conditions and the quality of life of the people. "The thrust of the urbanisation policy during the next decade would be to give greater emphasis to the provision of adequate infrastructural and other facilities in the small, medium and intermediate towns which have been neglected hitherto in this respect. The aim would be

to strengthen these market centres to equip them to serve as growth and service centres for the rural hinterland. For this purpose, increased investments are proposed in these towns in housing, water supply, and communication facilities. Likewise, facilities for education, medical care and recreation will need to be augmented."¹ The new urban policy enunciated in the Sixth Plan (1980-85) is, therefore, directed to optimise investment from the viewpoint of both regional and national growth by increased investment in metropolitan and large cities for sustaining their economic base and improving their conditions of life and at the same time making investment in physical and social infrastructure in small and medium towns.

To promote the development of small and medium towns, the Government of India introduced a centrally sponsored scheme of Integrated Development of Small and Medium Towns (IDSMT) during the year 1979-80. The 'Guidelines' of the scheme were circulated to the state governments in December, 1979. In the Sixth Plan, the scheme proposes to cover 231 small and medium towns for integrated development. The towns are to be selected by the state governments on the basis of the criteria laid down in the 'Guidelines' in terms of population of 1 lakh and below, on the basis of 1971 census, giving preference to the district towns, sub-divisional towns and mandi-towns. The plan has allocated an outlay of Rs. 200 crores with a total plan provision of Rs. 96 crores in the central sector. The funds required for the scheme are being provided on matching basis by the central government, the state government and the local authority. The component of central assistance will be in the form of loan to the extent of 50 per cent of the cost or Rs. 40 lakhs, whichever is less.

In order to review the progress and problems of implementation after two years of operation of the IDSMT programme, a two days' National Seminar on Integrated Development of Small and Medium Towns, sponsored by the Union Ministry of Works and Housing, was organised under the auspices of the Centre for Urban Studies of the Indian Institute of Public Administration, New Delhi, on March 18-19, 1982. The

¹Government of India, Planning Commission, *Sixth Five Year Plan, 1980-85*, p. 395.

Seminar was inaugurated by the Union Deputy Minister for Works and Housing — Braja Mohan Mohanty. In his address, the Hon'ble Deputy Minister also communicated the 'Best Wishes' of the Hon'ble Minister for Works and Housing and Parliamentary Affairs, Bhishma Narain Singh, for the success and fruitful deliberations of the Seminar, who could not come due to some other more urgent preoccupation in connection with the Parliament's session. The Deputy Minister also released the proceedings of an earlier Workshop.²

In his welcome address Director P.R. Dubhashi, IIPA, highlighted the importance of the central scheme of integrated development of small and medium towns in the wake of "bursting of the metropolises at the seams and small towns undergoing even some kind of a decline. As a consequence of this imbalance, spatial growth has been manifested in terms of social costs of various sorts, in terms of human suffering in the urban sector, in terms of growth of slums and shanties, in terms of unbearable burden of the infrastructural facilities in the cities, whether it is transport, or water supply, or environmental hygiene". These inherent tendencies have to be countermanded and the strategy for spatial growth, as it implies shall get integrated in many senses of the term. To deal with the problem of imbalances in growth in an integrated manner, he suggested integration of economic and sociological approaches with the physical and administrative approaches and the integration of micro-planning with macro-planning.

The Union Deputy Minister for Works and Housing, Braja Mohan Mohanty in his inaugural address added a new dimension to this programme. He strongly advocated that those who are associated with the integrated development programme should not forget to educate people to create cultural atmosphere in the country to promote the cult of our development programme with an urge to serve the country. Mentioning the problem of migration to metropolitan cities and other larger urban areas, the Deputy Minister said that our attempt should be not merely to stop migration but also

²R.K. Wishwakarma (ed.), *Integrated Development of Small and Medium Towns: Critical Areas and Issues for Policy Options*, New Delhi, Centre for Urban Studies, IIPA, March, 1982.

to reduce the gap between rural and urban areas. Referring to the problem of ecological imbalance and environmental harmony, he further mentioned that in our cultural heritage, we have to worship and adore nature as a friend, philosopher and guide. The problem is to rebuild that cultural background and cultural ethos all over the country and among the community to achieve environmental harmony and the ecological balance to create better living conditions in the country.

In order to have pointed discussion on the relevant aspects of the IDSMT programme, R.K. Wishwakarma presented a number of issues and objectives, on the table of the house for consideration. He observed that "the essence of integrated development strategy lies in 'operational explorations' and 'linkages' established while conceptualising the formulation of a plan . . . and, it has to be conceived explicitly based on development priorities of the town, in terms of: (i) integration of different goals and objectives; (ii) multi-level inter-sectoral convergences of services and their integration over space This requires new approaches in the methods of urban development including changes in the current status and methodology of urban planning and new methods of popular participation, including changes in the power structure that controls decision-making". He also outlined the following objectives of the Seminar.

OBJECTIVES

1. To review the progress and problems of programme administration.
2. To conceptualise integration in project formulation as an operational concept in terms of multiple-objectives, multi-sectors and multi-levels for an integrated package area development programme.
3. To explore the mechanics of inter-sectoral integration at the local level.
4. To increase employment and raise productivity with the satisfaction of basic human needs, the 'economic inputs' have to be reinforced by 'social inputs'.
5. To revitalise the informal sector of small and medium towns.

6. To explore the possibilities of enhancing and strengthening public relations in environmental sanitation including management of solid wastes.
7. To enhance and manage financial and human resources with a view to increasing the capability, confidence and awareness in the beneficiary.
8. To evoke community participation to combat the ills of politics of urban development.
9. To create a political culture to facilitate policy administration and decision-making.
10. To suggest a suitable model for organisational framework for integrated development.

SEMINAR DESIGN

To give coverage to these objectives, a number of papers were invited from the distinguished and eminent persons in the field from all over the country. The themes and issues presented through 23 papers provided a wealth of information, immensely useful and relevant, for proper preparation of project reports and their implementation. These were discussed in three technical sessions and one concluding session, namely:

- Session I—Review of IDSMT Programme Implementation: Problems and Strategic Policy Issues.
- Session II—Resource Management: Financial, Human and Environmental including Shelter, Infrastructure and Services.
- Session III—Political Ecology: Community Participation and Organisation for Plan Implementation.
- Session IV—Conclusions and Major outcome of the Seminar.

The Part I of this volume includes Introduction Chapter 1 and proceedings and deliberations which have been covered under Chapter 2: Proceedings of the Seminar; and Conclusions and their Policy Implications appear in Chapter 3. The Part II of the volume contains technical papers contributed in the Seminar. These have been grouped into three sections. In a large measure, these papers deal with appraisal of the IDSMT

programme administration with a view to providing an analysis of the major problems and issues facing decision makers and practitioners in the process of implementation of integrated development projects in small and medium towns, and the manner in which the project implementation responds to the concerned community and *vice versa*. It also gives a comprehensive coverage to many problems and issues from conceptualisation to the development strategy, financing the project to the mobilisation of resources, strengthening economic base to the management of informal sector, environmental sanitation to the management of solid wastes, politics of urban development to the culture of development, decision-making to decision-taking, and people's response to people's involvement in planning and decision-making process.

To have a synoptic view of the various technical papers, the theme of each paper is being highlighted in following paragraphs. Shafi lays stress on the selection of the town within the ambit of a statewide urban development strategy for project formulation and suggests that programme of action be tailored in accordance with the topography, specific needs and circumstances of the area (Chapter 4).

Reviewing the progress of IDSMT programme implementation P.S.A. Sundaram stresses on promoting a kind of balanced development of metropolitan cities by increased investment to sustain their economic base and improved environmental conditions and at the same time investment in physical and social infrastructure of small and medium towns (Chapter 5). Emphasis is laid on capital budgeting for urban development programme and linking it to the state plan to pool together all the sectoral funds available for urban development. In raising many problems and issues in perspectives C.S. Chandrasekhara points out that there cannot be any disagreement with the objectives of the IDSMT programme, but there are several reservations in the scope and implementation of the programme (Chapter 6). He feels there is neither objectivity in the selection of the town which is based on socio-political considerations nor integration among the various activities taken up for the town. In his opinion, the town has to be linked to the hinterland as well as to the next order town in hierarchy within the region.

A section of the people feels that IDSMT programme is neither integrated nor the 'guidelines' are conceptually clear about the nature of integration. Gangadhar Jha is one among those and his contention is that the programme components do not conform to the financial integration at the town level. Spatial integration of the town with the hinterland and integration of the sectoral programmes require an integration of objectives, sectoral programmes as well as the policies (Chapter 7). H.U. Bijlani, on the contrary, feels that the 'guidelines' is 'one of the most near-perfect documents' but it has not been adhered to in the preparation of many a project report. While raising many important issues from the census definition of urban area, in each census count, to the selection of towns for integrated development, he advocates the inclusion of bigger towns for integrated development in order to trickle down the growth impulse to a much larger region (Chapter 8).

To J.P. Dube, it looks paradoxical that while the programme is known as integrated development of small and medium towns, its scope of integration is confined within the boundaries of the towns selected for development without an overall integration of the settlements within the region. There is no account of their inter-linkages and inter-dependencies and the pattern of financing the programme "may not lead to the integration of various activities at the town level unless the programme is conceived in its totality as a composite whole and funds made available accordingly" (Chapter 9). In selecting towns, the growth potential or growth impulse of the town should be the criterion of selection, since it has the advantage of 'spontaneous growth'.

Regional variations in social and economic conditions and their density are also manifested in human settlements both rural and urban. It may be a case of integrated rural development or integrated development of small and medium towns. But the short term integrated programme has to be backed by resource mobilisation and its utilisation programme within the broader framework of master plans. It is in this context that Mathew Varghese discusses the implementation of IDSMT programme and its smooth functioning in the state of Kerala (Chapter 10). In his opinion, there has

to be a proper balance of both remunerative and non-remunerative schemes for augmenting the local resources of implementing local bodies. Giving the overall picture of the progress of the scheme, D.S. Meshram feels that the progress of the scheme has been far from satisfactory. This he attributes to three critical areas, namely, technical, administrative and financial. His stress is on selecting those towns which really have the potentials for growth as service centre (Chapter 11). Due to faulty budgeting of the local authority and the capital works being financed out of loans, the weak fiscal base of the local authority does not permit its repayment and, therefore, the alternative lies in financing of projects by way of grants. This is the contention of K.N. Rao (Chapter 12).

Informal sector is one of the most crucial and important though, 'unprotected' and 'under-privileged', sector of an urban economy. In the opinion of E. Siliezar, there is a need to revitalise this sector by strengthening and organising it, rather than by taking resort to 'charity' or 'assistance' approaches (Chapter 13). Based on a kind of micro-urban development model, Siliezar also suggests, the revitalisation plan which should include the provision of public services like: (a) market, (b) an industrial estate, (c) a self-help housing programme, and (d) a financial corporation. It also requires informal ways of dealing with this sector. On the basis of an empirical study of a small and medium town in the National Capital Region, R.L. Pitale points out that the growth of the informal sector is closely linked to the industrial growth and the rate of population growth of the town. This demands strengthening of the economic base of these towns with supportive measures (Chapter 14). Although the informal sector covers the informal groups of primary, secondary and tertiary sectors of an urban economy, Kamta Prasad feels that there is a need to strengthen the tertiary sector to meet the increasing demand for services like supply of improved seeds, fertilisers, credit, pesticides, technical advice and equipments for a better integration of the town with the hinterland (Chapter 15).

A great deal of concern is shown by many a expert to the pollution of water resources and degradation of natural

environment, disrupting the social ecology and environmental harmony of mankind. On the basis of their empirical study L.N. Vyas, S.K. Shankhla and D.K. Billore on entrophication in Udaipur lakes provide conclusive proofs to the contamination of water and incidence of water borne diseases in the township (Chapter 16). But a section of people expressed their concern more so about human environment in terms of its improvement, environmental sanitation and management of solid wastes including disposal of human excreta in integrated development of small and medium towns. V. Gopal feels that the management of solid wastes should have a bolder programme of people's education to be followed by supportive law, sound organisational structure, technical capability including machinery and equipment, adequate finance and public cooperation (Chapter 17). The mission should be "if it is bad, make it good; if it is good, make it better; if it is better, make it best. But if you think, you can better the best, don't take the risk. But G.S. Oberoi has gone to the extent of adding a separate chapter in the IDSMT project reports and which should be made even mandatory by the Ministry of Works and Housing as an essential component and financial support given for this (Chapter 18). To D.N. Khurana, the management of solid wastes and disposal of human excreta requires besides education, the public participation and cooperation and improved public relations for better upkeep of environmental sanitation. The author feels that location of dust-bins and *Dalaos* (collection centres) needs to be earmarked in the layout plans at the planning stage (Chapter 19). Considering a huge cost of installation of sewerage system in the township, B. Pathak on the basis of his experience and innovation carried forward by Sulabh-International, suggests a low-cost toilet technology for the disposal of human excreta in the integrated development of small and medium towns (Chapter 20).

The upgrading and improvement of environmental conditions of the town also requires the provision of services and infrastructural facilities. William J. Cousins through his basic services approach provides a low cost replicable strategy involving local community volunteers, who are linked to the

formal structure by para-professional workers (Chapter 21). The strategy has been conceptualised in terms of 'wheneers' which includes water for drinking and household use, health care both preventive and curative, education—pre-primary and primary and out of school education for children and women, nutrition, economic activities, environmental sanitation recreation and shelterimprovement for protection, privacy and security of life. It is a well known fact that development does not benefit from additional people, who are uneducated, in poor health and ill-housed. The task of urban planner, therefore, becomes to respond to the growing needs and aspirations of the people for the creation of a liveable environment in small and medium towns.

Sites and services programme is part of planning methodology but land tenure, housing finance and the development of low-cost building structures and some other relevant developments, are the manifestations of new developments in urban planning methodology. For reducing the cost of housing the urban poor, S.K. Sharma suggests an approach of cluster-housing, where about 16 families shall share common facilities like water supply, open space and other conveniences (Chapter 22). But he warns that the programme, however, should not be based on false standards, wrong technology and selective intervention.

Many arguments are put forward that a large mass of humanity is living in rural and urban settlements. There are often arguments of national aggrandisement—'We need more people to develop the country's resources' which can be heard from politicians. But there is no stress that 'we need more people so as to improve average living conditions and the quality of individual life'.³ It is in this context, the authors of section III, stress on community involvement and people's participation and orientation of political ecology and the decision-making process towards a culture of development further away from the politics of development. In Chapter 23, S.N. Mishra suggests that as the masses exhibit the characteristics of subject culture and the benefits do not

³Robert H. Cassen, "Population and Development: A survey" in Paul Streeten and Richard Jolly (eds.) *Recent Issues in World Development: A Collection of Survey Articles*, Pergamon Press, 1981.

percolate to them, they are not responsive to development programmes. Therefore they should be involved in decision-making process as well as in sharing the benefits of development. To K.L. Julka intervention in planned development is the *sine qua non* of integrated development and, therefore, with a view to forestalling development, the dangers of bureaucratic elitism and totalitarianism, people's participation is necessary (Chapter 24). Commenting on the functioning of democracy, Vijay Laxmi Pandit stresses that Lincoln's celebrated definition of democracy does not rhyme with the Indian political reality. The lower class feels alienated due to lack of political consciousness and, therefore, there should be group discussions through the mass media and identification of political leaders and the bureaucracy with the problems of people in citizen culture (Chapter 25).

In any programme of plan-preparation, plan-implementation and plan-administration, organisation and inter-agency institutional coordination is a must. No planning exercise could be undertaken in the absence of a proper organisation. To this end, P.T. Hardikar has given a considerable thought and attention and also made constructive suggestions (Chapter 26). To him coordination is more concerned with the frame of mind rather than with the mechanism.

The subject matter covered in the volume is intended to serve as a guiding source material on IDSMT programme—as a reminder of at least some of the critical areas and major issues that should be considered initially in project identification and later in project formulation.

SUMMARY OF THE PROCEEDINGS

The theme of the Seminar was deliberated upon in three technical sessions stretched over two days. The fourth and the last session was devoted to a discussion of the Rapporteurs' report of the technical sessions which helped in arriving at conclusions and major outcome of the Seminar.

SESSION I

The first technical session was devoted to the "Integrated Development of Small and Medium Towns: Review of IDSMT Programme Administration: Problems and Strategic Policy Issues". The session started its deliberations under the chairmanship of M.K. Mukharji, Secretary to the Government of India, Ministry of Works and Housing. Initiating the discussion he referred to the objectives listed for this seminar by R.K. Wishwakarma in his address. The objectives spelt out are, of course, very important and wide. He suggested to focus the discussion on the important and relevant issues. He felt that such a Seminar has great value as it provides an occasion for the interaction of people, who think on the subject, who advise on the modalities of implementation, and those who are involved in programme implementation. Associated as he is with the ministry incharge of successfully pushing through this centrally sponsored IDSMT programme, Mukharji hoped that the distinguished gathering in the Seminar shall address itself to the specific aspects of the programme so that the outcome of the two days' deliberations shall be useful for the Union Ministry of Works and Housing and also for the various state governments, where the programme is being implemented. The feedback thus

received would be usefully applied for ensuring proper implementation of the programme.

Mukharji also emphasised that unless the Seminar considered the different issues connected with the development of small and medium towns, it would be only glossing over the issues. He, therefore, cautioned not to invite the risk of over simplifying the issues. Referring to the list of participants, he expressed his happiness to find distinguished people in the spheres of town planning, academic activities and public administration attending this Seminar. He therefore, hoped that the discussions and the outcome of this national Seminar would be useful for programme administration.

In programme formulation, Mukharji observed, the ministry tries its level best to ensure the taking of a total view of the programme so that a mere picking of a few schemes here and there is prevented. It also insists on the state governments to spell out what they are going to do in the next five or ten years in the towns selected for development. Although only 231 towns are to be selected out of about 3,000 towns, it is, nevertheless, a modest beginning. As the outlay is not large, many a thing, might be left undone. "But we would have made a beginning", observed Mukharji.

While urging the contributors of technical papers to the Seminar to present their papers, Mukharji observed that the Seminar has the distinct advantage of having some of the papers written by people who are involved in day-to-day implementation of the programme and monitoring the progress of implementation, and also by the people who are eminent academics who could give a proper academic layout to the approach also. He hoped that the papers presented would help in directing the discussion towards a purposeful conclusion which will be useful for the implementation of the programme. He then requested the authors of the papers to briefly highlight the issues raised by them.

Sayed S. Shafi was the first to present his paper titled "Integrated Development of Small and Medium Towns in India's Urban Context: Problems and Prospects". In his presentation, he observed that Indian urbanisation has been

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marked by the urban growth of metropolitan cities. The 12 metropolitan cities have about 26 per cent of India's urban population. He felt that this trend of urbanisation was a matter of serious concern for policy makers, politicians, planners and administrators. He referred to a number of observations made by various experts on India's urbanisation, urban planning and development reflecting serious concern over the metropolitan centred urban growth. He further stressed that given the diversities of India, urbanisation has to be based on a large number of small and medium size towns. Expressing his gratification on the Planning Commission's recognition of the important role being played by small and medium towns in the national urban development strategy, he said that the nation has yet to have an urbanisation policy and urban development strategy.

He referred to the Task Force on Small and Medium Towns appointed by the present Prime Minister Indira Gandhi in the year 1975-76, which suggested a multi-pronged approach laid emphasis on synchronisation of actions in various areas if contemporary evils of urbanisation have to be mitigated. As a prerequisite for the proper selection and development of small and medium towns, the Task Force identified certain imperatives and stressed the need to supplement the national population policy by directly linking it to the system of human habitat. Among other things, it also suggested that in each state the Town and Country Planning Department be strengthened to play the role of a pivotal organisation.

During the Sixth Five Year Plan, the Union Ministry of Works and Housing issued 'guidelines' for the selection of small and medium towns and for preparing the blue prints for their development. To make the programme viable and truly integrated, the Town and Country Planning Organisation of the Government of India has suggested that while selecting the towns three imperatives, in this regard must be considered: (i) the natural endowment of the given town, (ii) the historical heritage of the town; and (iii) the improvement of the overall environment of the town. Shafi thus stressed that what was more important was the selection of the town within the ambit of a statewide urban development strategy

for the project formulation.

The problems have cropped up primarily because of : (i) extraneous considerations in selection of towns by the states, (ii) inadequate planning expertise to formulate proper projects in some states, (iii) no matching funds from state governments, (iv) administrative delay in routing project reports as well as funds, (v) problems of land acquisition, and (vi) cost escalations. He also cautioned that though the general guidelines have been issued, the programme of action has to be tailored in accordance with the topography, the peculiar needs and the circumstances of the area. Referring to the four stages in which the IDSMT programme has been conceived, he said that the first and the second stages of project formulation and appraisal, respectively, are by and large, over and the attention is presently being directed to the third stage of programme, *i.e.*, monitoring. The fourth and the last stage shall be concerned with the evaluation of the progress of the programme implementation. He hoped that all out effort shall be made to execute the programmes formulated so far. A modest but hopefully meaningful beginning has been made. Shafi concluded his presentation by saying "let us continue our effort the best we can, to give a new direction, a new dimension to the urban future".

At this stage, the Chairman, Mukharji left the seminar to attend to some urgent matter requiring his attention in the ministry and P.R. Dubhashi, Director, Indian Institute of Public Administration occupied the Chair and further conducted the business of the first technical session. He requested P.S.A. Sundaram to present the main issues raised in his paper entitled "Integrated Development of Small and Medium Towns: Review of Implementation".

P.S.A. Sundaram in his presentation summarised the circumstances under which the IDSMT programme has been drawn up and also mentioned leading features of the 'guidelines'. He observed that the programme has been devised not to restrict the size of metropolitan cities. The objective is to promote balanced development of metropolitan cities and the small and medium towns. This, according to him is to be achieved by increased investment in metropolitan and large cities for sustaining their economic base, improving the

living conditions of their citizens and also simultaneously making investments in physical and social infrastructure in small and medium towns. The strategy is thus on development all around, not the development of small and medium towns at the expense of the metropolitan cities.

Reviewing the progress made in implementation of the IDSMT programme, he said that till January 1982, (out of 231 towns to be covered by the programme) proposals for the development of only 162 towns were approved and a loan assistance of Rs. 15.40 crores was released by the central government. However, only a few states have undertaken a systematic exercise for identification of the towns. Proper appreciation of regional functions performed by the selected towns and the nature of the integrated processes envisaged in the 'guidelines' have also been found lacking in the project reports.

Referring to the conceptual overture of the 'integrated' development, he observed that as mentioned by R.K. Wishwakarma and which emerged from the proceedings of an earlier workshop¹ it implied "multi-level and multi-sectoral convergence of services" and their coordination at the city level, both in the context of the district as well as in the context of the local body, which again involved coordination of different agencies working at the city level. But the schemes have generally been formulated by the Director of Town Planning at the state level having merely a nominal consultation with the local agencies. This often resulted in distortion of the scope and location of the projects and, in certain cases, even in abandonment of the project after its approval. Problems have also been observed in the course of project implementation primarily owing to the fact that, at the state level, by and large, no clear-cut organisational responsibility existed for urban development, town planning and municipal administration.

The most important aspect of the programme, according to him is to promote the local government capabilities in terms of finance, preparation of plans and their implementation to

¹R. K. Wishwakarma (ed.), *Integrated Development of Small and Medium Towns: Critical Areas and Issues for Policy Options*, Proceedings of the Workshop held on July 14-15, 1981, Centre for Urban Studies, IIPA, March, 1982.

promote the long term sustained development of towns. Urban development being a state subject, the central government can act only as a catalytic agent. Ultimately, the state and local governments have to manage it. It is this process which has to be initiated in the various states.

C.S. Chandrasekhara was the next to present his paper "Integrated Development of Small and Medium Towns: Problems and Issues in Perspective". He said that whereas there could be no disagreement with the objectives of the IDSMT programme, there could be several reservations on the scope and implementation of the programme. As all the small and medium towns are not being brought under the ambit of this programme, only some of them are to be selected, it is here, he said, that we have not acted prudently. Selection of towns, instead of being based on objective criteria, has been based on 'socio-political' considerations. This has led to the major distortion of the programme. Secondly, even though a town was selected for development, the efforts to develop it became a single shot exercise as it is not expected to be sustained over time. Hence he suggested to cover all the small and medium towns and sustain the development effort over longer period of time than the Sixth Plan period.

He observed that one could question this suggestion on the basis of shortage of resource. But a look at the previous two plans—(Fourth and Fifth) indicates that the budgetary plan provisions could not be spent even to the extent of 50 per cent. Even if the scarcity of funds happens to be a problem in the present plan, the programme could be carried forward to the next plan as has been the case with the multi-purpose river valley projects, steel plants, etc.

In order to achieve an integrated development, he suggested a three dimensional programme of integration. Firstly, integration has to be among the various schemes taken up for development of the town. This may be assumed to take place. The second dimension of integration, which is supposed to be more crucial, is the integration of the town with its hinterland. The development of small towns has to be conceived in terms of the services which the town renders to the surrounding areas. The third dimension of integration relates to linking the small towns with the higher order towns and

cities in the region. Integration has, therefore, to be conceived in the form of flock of people, commodities and services within a multi-directional spatial frame. Chandrasekhara further emphasised that unless integration is conceived within the dimensions suggested above, the IDSMT programme may end up tamely as a programme for the provision of services.

He felt that the programme, in order to be sustained, requires development of management capability in terms of managerial set-up and technical knowhow at the local level. He advocated that the city manager type of municipal Executive with supportive technical staff would serve the purpose. He also stressed to tone up the financial administration and resource mobilisation for implementation of the projects. The existing delays in transfer of funds to the state governments and in turn to the local authorities could be avoided if the funds are channelised through the scheduled banks located in the towns. The banks could even be encouraged to undertake the appraisal of individual schemes.

Gangadhar Jha in his paper "Integrated Development of Small and Medium Towns: Some Conceptual Issues" raised certain critical issues both at the conceptual level and practical plane. Elaborating the conceptual overtures of an "integrated development programme", he observed that the IDSMT programme does not seem to represent as an integrated programme firstly, because the 'guidelines' formulated for the programme itself are not conceptually clear about the nature of integration and secondly, the programme components of the approved projects do not conform to the concept of integrated development programme as it is understood and practised. The approved project reports, therefore, are neither expected to promote spatial integration of the towns with the hinterland nor bring about functional integration of the sectoral programmes.

Raising the issues for a proper implementation of the programme, he observed that the central financial assistance is too meagre to fulfil the larger objectives of integrated development. Major share of the needed fund has, therefore, to come from the state sector where firstly, there does not appear to be any mechanism of financial control to ensure the flow of the requisite fund and secondly, the demand for funds

on state finances by other priority sectors may scuttle the allocation of resources. Moreover, apart from contributing financial resources for implementation of the programmes, the civic bodies have also to mobilise enough resources for the maintenance of the created capital assets. The problem of local finance becomes all the more serious, if the state matching contribution is to come as a loan to the local bodies. He therefore, felt that ways and means of promoting fiscal capacities of the local bodies should also have been integrated into the programme. Jha then suggested an integration of objectives, sectoral programmes and also the policies.

H.U. Bijlani high-lighting the theme of his paper, disagreed with the views expressed by Gangadhar Jha, and felt that there was nothing wrong with the 'guidelines'. He called it as "one of the most near-perfect documents". However, project reports have been formulated, only with a view to get the central financial assistance. Accordingly, components of the central sectors are included in the project; the state sector being limited to the inclusion of only those programmes which already form a part of the state plan. The result is obvious: the project is no longer an integrated project for integrated development of the sectoral programmes and also of the region. This is why, he felt, that the Union Ministry of Works and Housing is organising seminars, workshops, conferences, etc. Such forums provide opportunities to focus attention on programming aspect of the integrated development.

He also felt that the funds provided for this scheme are not adequate for a really integrated development programme. He did not appreciate the limit of one lakh population for the inclusion of towns in this programme. What is desirable is the development of the region as a whole. Development of bigger towns would be more useful as they happen to be the centre of economic and social activities of a much larger region and thus the growth impulse and development of the town would trickle down to a much larger region.

Bijlani stressed the need for devising low cost solution for solving the public health, sanitation and other problems. He cited the success stories of the disposal of human excreta through toilet technology developed by the Sulabh International

in Bihar and 'Ultra Matka' in Gujarat. Availability of funds being a major constraint search for low cost solution for urban problems and a lower standard of services would help in covering larger urban population under the programme.

Raising organisational issues in implementation of the IDSMT programme, Bijlani observed that the towns being developed under this scheme have not devised the type of organisation recommended by the 'guidelines'. Coordination among the involved agencies and monitoring of implementation which are vital for the successful implementation of the programme have also not received adequate attention in the towns of different states. Therefore, he suggested to identify existing institutions and the one which could do the work.

In the state sector, Mathew Varghese, wanted to share the experience of his state Kerala in project formulation and implementation of the programme. Financial resources being a major constraint, only those towns have been selected in Kerala for development which already have had detailed town planning schemes for their development, and are strategically located in the overall settlement pattern of the state. Implementation of the programme has been proceeding smoothly with full utilisation of the sanctioned funds. This, according to him, was primarily because of the political and executive leadership being provided in these small towns.

However, implementation of the programme has also highlighted certain important aspects of urban development. Recounting these Varghese said that firstly, it illustrated the need to have proposals for planned urban development with resource availability so that whenever resources are available, the programme of certain section could be initiated without any loss of time. Secondly, it has been experienced that the resources available for this programme are meagre for implementation. Constraints on the availability of building materials have also affected the implementation adversely. Thirdly, in order to be effective, the schemes have to form part of an overall integrated national and state policy for socio economic and spatial planning for development. Finally, the weak financial capability of the civic authorities is another major problem in the state. The scheme, after implementa-

tion is likely to be a financial burden for the municipalities especially if the selection of projects is not done judiciously. They have to repay the loan advanced by the central government and will also have to mobilise resources for the completion of a major part of the overall programme. Therefore, there has to be a proper balance of remunerative and non-remunerative schemes for augmenting the local resources of implementing municipal bodies.

DISCUSSION

After the presentation of papers, the session was open for discussion. Reacting sharply to the papers presented in the first session Akbar Ali Khan did not appreciate the segregation of the municipal authorities both from project formulation and implementation. Narrating his experience of the programme, he observed that in Andhra Pradesh implementation of the IDSMT programme vests with the urban development authorities and municipalities; in Kerala, the implementing agency is the municipal council, while in Tamil Nadu, it is the urban development authority. As the local authorities are not involved in project formulation, they are not aware of what is being done, what the scheme is all about and how it is to be implemented.

Referring to coordination for implementation, he said that although coordination committees have been constituted at the district and state levels, these are, by and large, non-functional. Their composition is not balanced and they rarely sit to transact the business for promoting coordination. Even if these committees are functioning, they are external agencies; there is nothing internal within the municipality to evaluate the scheme and its implementation. He suggested to set up committees on land use, finance, programme performance and review of implementation. This would facilitate both internal and external evaluation.

S.N. Mishra differing with an earlier observation made by one of the papers contributors said that it would not be possible to bring all small and medium towns under the ambit of the IDSMT programme. He felt that the scarcity of financial resources will not permit to launch this programme on a very

large scale. He stressed the need to monitor the implementation and to evaluate the impact of the programme. Subsequent policy responses have to wait for the feedback on implementation and impact.

Vijay Lakshmi Pandit felt that the responsibility of implementation rests with the bureaucracy. She wished the masses to be involved with this programme.

Talking about the people and the programmes for enhancing the quality of life, Kirtee Shah observed that when one talks of management of cities—whether large or small—basically and predominantly, one talks about managing the lives of the poor. But those involved in planning for poor people are largely alienated from the poor. The town planners and the physical planners, who propose the projects for urban development, do not seem to be concerned with the reality of poverty. Illustrating his point of view he further observed that in the small and medium towns, as much as 70 per cent of the existing population belongs to the informal sector. But the shops to be constructed under the IDSMT are going to cost something about Rs. 10,000 to Rs. 12,000 each, which cannot be afforded by a poor. He, therefore, suggested that some proportion of the total number of shops to be constructed, should be low cost shops which could be afforded by the urban poor. This essentially required a change in thinking process of the people who are involved in the planning process. One of the major drawbacks in planning for urban development is that we do not have the views of the people for whom we are planning. Referring to the increasing number of urban poor in the towns and cities of all sizes, he wondered whether our planners understand their needs and priorities and are really planning for them.

T.S. Papola felt that there is a lot of conceptual confusion in the IDSMT programme. As one goes down to the state level, the conceptual confusion goes on increasing and this could be minimised, if we do not use the word 'integrated' all the time. The programme seems to be a kind of scheme in which the central government provides some financial assistance to the state government for upgrading certain kinds of services in small towns. He wondered whether there was any integration in this. Referring to another program-

me of Integrated Rural Development he observed that, he is not able to find out what is being 'integrated' there also. But the confusion seems to be much more in urban development. Integrated development here would have meant regional development and integration of the town with the region and as also an integration of activities. But the programme as presently conceived and being implemented is limited to the provision of certain services. Even here also, the projects that have been formulated are not up to the standard. The funds flowing are, therefore, going to be used inefficiently.

The need and importance of decentralisation is though emphasised, he felt that there is a complete lack of expertise at the local level for plan formulation. This requires policies for strengthening the local bodies in terms of expertise, equipment for formulating a wiser plan. Papola also suggested to give paramount importance to the function of the town and formulation of projects which could enhance the role performance and the function of selected towns.

Shafi intervening in the discussion agreed with Kirtee Shah's views about planning for the urban poor. He advocated that the programmes and the allocation of funds must have a realistic association of those for whom they are meant to serve. He thought that the planners need to have better appreciation of people's needs and poverty. He, however, felt that the problem of poverty is a complex thing and cannot be entirely dealt with by the physical planners alone. Therefore, unless there is a real and meaningful strategy at several other levels, the physical planners cannot give the kind of inputs required to deal with the problem. Habitat is not a static entity; it is changing all the time. The urban designer has to have a sensitivity to the problems of the community he is planning for. There seems to be an alienation of the people to whom our plans are addressed. The planners need to have an understanding of their problems and see how far they could ameliorate some of the basic problems confronting the people.

Shafi also stressed the need to know the habitat. While guidelines are guidelines and can never be more than that, once a town is selected for the IDSMT programme, we must try to understand the habitat for what it is, where it is, and

what its problems are and accordingly, a scheme of priorities has to be devised to solve them. He also felt that presently project reports are being evaluated rather hurriedly. Project reports need to be considered and evaluated by giving much thinking to it.

Akbar Ali Khan considering the financing of the IDSMT programmes thought that allocation of funds is inadequate to promote an integrated development of the small towns. He suggested to utilise the funds of various state departments presently operating at the District or Taluka levels. These departments could be associated in the provision of services and for enhancing the quality of life in the town. He wanted the town planners to plan for the contiguous urban and rural areas and try to integrate what are the needs of the urban and rural areas and how the two can serve each other.

Intervening in the discussion Kirttee Shah felt that the confusion is not much in the conceptualisation of the programme for IDSMT, it is much more in the manner in which the programme is being implemented. In the context of programme objectives, he visualised essentially a three stage approach to the planning strategy. The first stage relates to the poverty pockets of the town where the people have been living without basic services in a deprecable environmental conditions. This has to be accorded the first priority. The second stage has to deal with the entire town for enhancing the quality of life. The third stage has to deal with the regional context of the town. The IDSMT programme has to deal with all the three stages. He, however, felt that presently only the first stage is being dealt with and thought that the subsequent two stages would hopefully follow.

Chairman: Winding up the discussion of the first technical session, P.R. Dubhashi, who was in the Chair, observed that the concept of 'integrated development' has indeed very wide implications and goes much beyond the mere provision of services and amenities. The concept involves nothing less than a redirection of the entire flow of the economy and the society so that it does not flow all the time in the direction of metropolitan centres but towards the small and medium towns. In order that this concept succeeds, it is imperative to examine the implications of our total plan for economic deve-

lopment in all the various sectors. It is the time that sectoral objectives are to be seriously considered for the development of small and medium towns. If this is not done and the prescribed schemes are simply pursued, the consequences would be other than those which we have in our mind. Already the hints have been given by Gangadhar Jha and others that in the name of integrated development, what are being presented as projects are inclusion of various service components. The Chairman thought it to be a warning which should make us realise that there is every danger of the programme becoming the one, where money is spent but the objectives are not realised. He hoped that this Seminar would contribute to the effectuation of the programme objectives in a much more meaningful way. The concept of IDSMT as conceived should reach right down to the operational level. This could be possible only if the Town Planner responsible for programme formulation works it out taking the due cognisance of the concept. Referring to H.U.Bijlani's earlier observation that the 'guidelines' conceptually are 'near perfect', the Chairman observed that it may be so but by itself it may not serve the purpose, if it is not understood in the way in which it ought to be understood. The conceptual implications have to be fully spelt out.

If dispersal of activities has to be achieved, he observed, there has to be a great deal of emphasis on adopting spatial planning; making some perfunctory references to spatial planning in the plan document would not suffice. Integrated development goes far beyond the responsibility of a single ministry, all the ministries concerned with the development of various sectors must also have a clear idea of what is implied in the kind of spatial dispersal of which the development of small and medium towns is a part. Spatial dimension of the sectoral process must be brought together.

He favoured to have first pilot development programme for the small and medium towns integrally connected with the development of the area of, say, the selected district and then work out fully the flow of social and economic activities in the years to come and within that context work out the plans for the development of small and medium towns. If this is

done in one district, it could very well become the prototype in others.

In the wake of planned economic development, tremendous growth impulses have been emanating leading to complete transformation of the rural and urban areas within its influence. Citing the example of irrigation projects, he said that the increased agricultural production calls for the supportive activities of marketing, processing, etc., which need to be located to reinforce the growth impulses. But this does not happen in the urban sector. The urban centres located within the district or command area, are not being planned concurrently as part of the scheme of spatial development. This is a vital missing link and needs to be provided.

Referring to the oft mentioned nexus of this programme with the programme of attacking poverty, Dubhashi felt that the IDSMT programme has not been conceived as an anti-poverty programme. According to him, this programme has been conceived as a programme for the redistribution of population and services—which means redistribution of economic activities and related infrastructural facilities. It, thus, relates to the anti-poverty programme only indirectly as the redistribution of economic activities do create opportunities for redistribution of income also. Urban poverty being the spillover of rural poverty, and the metropolitan cities already bursting at the seams due to a large scale migration of rural poor, the small and medium towns provide an opportunity for employment generation and also for creating minimum social conditions. Therefore, this programme of IDSMT, though presently being the strategy of redistribution of population, would eventually serve as an important strategy of dealing with the problems of poverty if followed successfully.

SESSION II

Session II of the Seminar broadly covered the theme "resource management: financial, human and environmental including shelter, infrastructure and services". It discussed at length, financing of the IDSMT programme with particular reference to resource mobilisation, revitalisation of the urban

informal sector for self-employment and strengthening of public relations, adoption of improved technology for environmental sanitation and the management of solid wastes. The session was chaired by P.R. Dubhashi, Director, Indian Institute of Public Administration.

The technical session started with presentation of the paper by Diwakar S. Meshram "Critical Areas and Issues in the Financing of IDSMT Programme: An Evaluation" which surveyed the progress made in project formulation, approval, funding, and implementation of the programme. As during the first half of the plan period only 173 towns (out of the target of 231 towns) have been covered under this programme and the central assistance of only Rs. 17.62 crores (against the targeted outlay of Rs. 96 crores) has been released and as of these towns, only 12 qualified for release of the second instalment, he felt that the progress has been far from satisfactory. He identified three critical areas technical, administrative and financial hampering the progress of the IDSMT programme.

Elaborating the critical areas relating to finance, Meshram made a number of observations relating to local and state levels. The small and medium towns, by and large, have poor economic base which is reflected in weak fiscal strength of the local bodies. Largely because of this, the state governments are rather reluctant to release the funds to the local bodies apprehending its misuse by them. Secondly, the State governments themselves have been facing the problem of mobilisation of additional resources. In order to avail the central assistance, the state government have to meet fifty per cent of the cost under the central sector and hundred per cent cost in the state sector. Because of the paucity of funds for urban development at the state level, most of the states are unable to meet the financial commitment for IDSMT and consequently have not approached for release of the second instalment. Thirdly, the central assistance itself is inadequate to meet the objectives of the programme.¹

¹Giving an illustration of Haryana, he said that the cost of land acquisition and development being about 4 lakhs per hectare, development of 10 hectares of land for site and services itself would consume the Central assistance of Rs. 40 lakhs, benefiting hardly 460 families.

In view of these, if the explosive growth of the metropolitan cities have to be restricted, he suggested formulation of an urban policy and to devise a strategy of selecting only those towns which really have the potentials for growth as service centres. Ways and means have also to be found for making a sizeable investment in such towns.

K. Narayan Rao presenting his paper mentioned some of the real fiscal difficulties being faced by the urban local bodies. Firstly, as the capital works are financed out of loans, the weak fiscal base of the local authorities does not permit its repayment. He, therefore, wanted the financing of the projects by way of grants. Secondly, in order to implement the plan schemes, additional staff is recruited against the plan posts. But after the plan schemes are over, the local bodies do not find the funds to retain the staff; nor can they be dispensed with because of various types of pressures being exerted on the local bodies. Thirdly, the actual growth of population in urban areas, especially in the large towns and cities belies all the projections of demographic growth. This adds further to the fiscal problem of the local bodies who do not find ways and means of mobilising additional resources. In view of these, Rao suggested to give some serious thinking to finding ways and means of overcoming the weak fiscal capability of the civic bodies.

E. Siliezar narrating his work experience in the field both in India and abroad showed a great anxiety over the doubling of India's population in the next seventeen and half years. He cautioned that unless we respond to the process of proper development relating it to the growth of population, it would be very difficult to overcome the population problems of India. He stressed that plans should not be target or project oriented but process and trend-oriented in order to provide a more flexible, democratic, administrative and managerial apparatus to receive and respond to public demands. Plans should mainly aim at human environment and all economic and infrastructural facilities and programmes should facilitate economic development in nation building.

Advocating the cause of revitalising the urban informal sector, Siliezar stressed that we should get rid of the charity approach or assistance approach in dealing with people. Our

goal should be to strengthen the primary, secondary and tertiary sectors of the economy to meet the challenge of population growth. This requires strengthening of public administration by committed people. Development operators should work like negotiators between public and private sectors, and that too, on an informal basis in terms of partnership and friendship at the grassroot level. They should adopt a non-formal approach to the basic needs of families lying below the poverty line through education, training and upgrading people to more organised bodies. The IDSMT programme should not side track these vital issues.

Referring to his paper "The Economic Revitalisation of the Informal Sector" he said that in order to provide minimum basic services and economic development opportunities to the informal sector, one needs to have three main inputs as a working hypothesis: (a) development approach for the people living below the poverty line; (b) revitalisation and technification of civil servants and other administrators to make them the best managers and exploiters of development; and (c) a systematic and mass approach to social communication and information as the main tool to transmit to people participatory planning. He suggested that the urban development plans for informal sector should design simple matrices of micro-urban development for a determined number of people. Such a matrix should include four public services: (a) market; (b) an industrial park; (c) a self-help housing programme; and (d) a financial corporation. Above all, there should be informal ways of dealing with informal sector and its people for contacting, educating and organising them.

R.L. Pitale presenting his paper "Industrial Growth, Informal Sector and Development of Small and Medium Towns" observed that his study of small and medium towns based on the Haryana sub-region of the National Capital Region indicates that the size of informal sector is positively related to the level of industrialisation and the decennial rate of population growth. These two reinforce each other and create capacities to absorb and retain a significant proportion of informal sector population similar to the metropolitan cities. Increase in the industrial activity, especially in the factory sector, has resulted in multiple economic activities

giving rise to a large size of informal sector in the medium towns in the sub-region thus reducing the population pressure on Delhi. He, therefore, suggested to strengthen the economic base of small and medium towns by strengthening the industrial sector so that it could increase opportunities of gainful employment in the informal sector.

Referring to the components of the IDSMT programme, Pitale felt that these do not provide a push to the critical minimum economic base needed for strengthening the economic base especially in the industrial sector. This, therefore, calls for integrating the operations of the state level financial and industrial development corporations for the development of small and medium towns. He suggested that the state governments should give mandate to such corporations for the development of small and medium towns and also relax licensing provisions in favour of these towns. But as all the towns cannot be developed as industrial centres, he suggested to develop a selected number of small and medium towns as focal centres of urban amenities and facilities. He referred to Shahabad Markand village in Haryana as a case in point.

Intervening at this stage, S.K. Sharma observed that Pitale's observations on the basis of his study of small and medium towns, around Delhi supports the viewpoint that utmost care must be taken in the selection of towns for the IDSMT programme. Only such towns should be selected which already have some economic base. Urban development itself cannot be the instrument of economic development. It has to follow economic development.

Kamta Prasad presenting his paper on "Development of Tertiary Sector in Small and Medium Towns" advocated to strengthen the tertiary sector in the small and medium towns for providing increasing job opportunities in these towns. Listing an array of activities coming under this sector, he observed that the green revolution ushered in by the adoption of modern farming technology has led to an increase in demand for services like supply of improved seeds, fertilisers, pesticides, credit, technical advice and equipments, and also for the marketing of agricultural products. Integrated development of small and medium towns, therefore, should strive to provide for these so that there would be a better

integration of the town with its hinterland. He, therefore, suggested to provide all sorts of assistance—fiscal, technical, etc., by the government. Facilities presently being provided to the small scale industries should also be extended to the tertiary sector.

The next set of four papers presented were devoted to an improvement of environmental sanitation and management of solid wastes in small towns. G.S. Oberoi, V. Gopal and D.N. Khurana dealt with the improvement of environmental sanitation and management of solid wastes whereas B. Pathak dealt with the low-cost toilet technology for the disposal of human excreta. L.M. Vyas *et. al.*, described the pollution of the famous Udaipur lake which is posing the problems of health hazard endangering life of the resident population of Udaipur.

G.S. Oberoi observed that Punjab was probably the only state where project reports of the IDSMT contain separate chapter for the management of solid wastes, thus displaying concern for improving environmental hygiene in the small and medium towns. He suggested a system of low cost solid wastes management to be incorporated in the project reports by others in different states. He urged that a chapter on solid wastes management in all the project reports of the IDSMT should be made mandatory by the union ministry of works and housing and the central assistance should be made available for this.

V. Gopal in his very thought-provoking and refreshing presentation provided humorous moments to the fatigued and strained delegates of the Seminar by looking at the problem of environmental sanitation and solid wastes management from three angles: (i) physical environment, (ii) biological environment, and (iii) socio-economic environment and by relating the theme of his paper with the alphabets appearing in his name. To the first letter in his name—'G', he related 'general introduction' of the subject; 'O' meant 'origin' of solid wastes; 'P' indicated 'proper storage and transportation of the solid wastes'; 'A' stood for 'alternative types of disposal'; and 'L' meant 'lastly', *i.e.*, conclusion.

Gopal very strongly pleaded that before anything is talked about the solid wastes management, there should be a control

on migration of people from small and medium towns to larger cities by controlling the push factors. Coming back to the subject he made five other recommendations. Firstly, he suggested to replace unhealthy open dumps with sanitary landfills on cost-effective basis. The second suggestion was to take up composting which would help sanitary disposal of the trash and would also ensure some kind of economic return. The third suggestion was to make use of all types of disposal and take no chance with the solid wastes. The fourth suggestion was to use all possible facilities available to manage the disposal of solid wastes without taking any chance and relying heavily on any one. The fifth and the last suggestion was to develop proper public relations for getting the best result.

In fact, he advocated to adopt a bold programme of people's education in the process of keeping the cities clean and making these cities livable with the help of supportive legislation and effective implementation. He further advocated that the effectiveness of public authority in any programme implementation depends upon five factors: (i) supporting law, (ii) sound organisational structure, (iii) technical capability including machinery and equipment, (iv) adequate finance, and (v) public cooperation. He stressed that unless and until all these factors are given due consideration by the government, municipal authorities and the general public, we should not hope to get the best results. It is in this connection that he suggested "if it is bad, make it good; if it is good, make it better; if it is better make it best. But if you think you can better the best, don't take the risk".

Although his presentation revolved round his name, it was interspersed with interesting anecdotes and tit bits. He concluded his talk by re-interpreting the alphabets of his name meaning differently this time and suggesting the planners to go, organise, plan and ask for lasting results ('G' for go, 'O' for organise 'P' for plan, 'A' for ask for, 'L' for lasting results).

The paper on "Environmental Sanitation and Human Waste Management for the Integrated Development of Small and Medium Towns" was presented by R.L. Dewan as the

author of the paper, B. Pathak, could not be present in the Seminar. Giving facts and figures about the existing service latrines in the country, it was argued in the paper that if the disposal of human excreta is to await the completion of sewer and septic tank system, the cost will be prohibitive and the goal of environmental sanitation is therefore unlikely to be attained. In order to mitigate health hazards and the human problems, it is imperative to devise a low-cost solution. The twin pit hand flush system, popularly known as 'sulabh sauchalya', appears to be the best low-cost solution for the disposal of human excreta. The paper forcefully pleaded that the provision of '*sulabh sauchalayas*' in private houses and the community sulabh complex at public places will be an appropriate technology for the improvement of environmental sanitation in small and medium towns.

L.N. Vyas presenting his case study conducted alongwith S.K. Shankhla and D.K. Billore on "Entrophication in Udaipur Lakes: Evidences and Prognosis" related to the aquatic system, because of all the substances that are necessary to life, water is by far the most important. The famous Pichhola lake which forms an integral part of Udaipur's social and cultural heritage also provides beautiful landscape attracting tourists from all over the world and thus making significant contribution to the economy of the state. The lakes surrounding Udaipur also provide a major source of drinking water. About 63 lakh gallons of water is consumed from these lakes and about 7000 persons visit this lake every day either for washing or bathing purposes.

Vyas, through his audio-visual presentation highlighted the problem of increasing habitation near these lakes both residential and hotel complexes; heavy deforestation in the catchment area of this lake, on the surrounding hills and elsewhere; and mining and quarrying of stones just in the neighbouring hillocks; heavy pollution of lake water due to washing and bathing and more so due to disposal of sewerage at 40 points around the lake and washing in of nitrates, phosphates and chloride from agricultural fields including the use of detergents, which have been some of the important causes of entrophication. This has led to contamination of water and the increase in the incidence of water borne dis-

eases in the township of Udaipur. He suggested a total ban on dumping of sewage and location of commercial and residential complexes near the lakes. He also suggested periodic monitoring of environmental conditions obtaining in these lakes.

S.K. Sharma was the last in the session to present his paper on "Housing for the Urban Poor". Talking broadly of the urban scenario in the country which is characterised by poverty, deprivation and insanitary living conditions of a large chunk of urban population, he suggested to orient the housing policies for this section of population. As the conventional housing has been beyond the reach of urban poor, he urged upon to innovate new housing designs based on least cost. He, therefore, suggested statutory earmarking of about 15 to 20 per cent of developed land for the urban poor and to ensure that it really reaches the clientele group. In order to reduce the cost, he advocated the concept of cluster housing being tried by his ministry in Bhopal where about 16 families have a common open space, water tap and other conveniences to share with. Based on incremental approach, the cluster of houses have the provision of addition of further floor area as and when the income level of the occupants increases. But in order to succeed, it requires a high standard of professional involvement. He, therefore, appealed to the officials, planners and architects to shake off the contemptuous attitude and values for the urban poor and develop professional involvement to provide shelter to the deprived ones.

After Sharma's presentation, the session was open for discussion.

DISCUSSION

Kirtee Shah reacted by observing that the financial provision for the IDSMT was too meagre. A crore of rupees to be spent in a town cannot be expected to restructure the economic base of the town and also enhance its capabilities of role performance in the hinterland.

Initiating the discussion on S.K. Sharma's paper, Akbar Ali raised a number of issues. By preparing the lay-out plans

(in the map), we can have good environment but can we be sure that the people who will be living in these houses or flats would like each other? He, therefore, suggested that unless the community approach is there, the concept of cluster housing may create frictions. Citing the experience of Hyderabad's integrated housing scheme (where the sites are given to the people) he doubted whether all the allottees would be living in these cluster housing.

C.S. Chandrasekhara referring to S.K. Sharma's paper pointed out that it raises a number of issues worth consideration. Citing the figure of 66 per cent as urban poor, he observed that "they are urban all right, but they are not poor". By virtue of being in the informal sector, all of them cannot be categorised as poor though they have some other disabilities which need to be tackled. Although housing of informal sector is one problem, the concept of neighbourhood and cohesive living, is another. Citing an example from a study of cluster housing in Naraina—one of the newly developed localities in Delhi, he pointed out that "linkages in the community have developed in their own fashion". Appreciating S.K. Sharma's awareness to the problem of community approach to living and cluster housing, he pointed out that the scheme has just been initiated and the implementation results are still awaited. He cautioned against the use of sub-standard material in the name of cost reduction. Government should subsidise the cost of professionals (architects) participating in the development of low-cost housing.

P.T. Hardikar agreeing with the same view felt that central assistance of Rs. 40 lakhs would not be sufficient to develop the town on the basis of integrated approach. This coupled with the short term nature of the programme lasting only for two to three years could not be expected to transform a small town into a growth centre. He, therefore, stressed the need to increase the flow of funds for this programme and based on a selected number of towns on long term basis, several short term integrated urban development projects could be conceived to achieve objectives of the guidelines.

S.K. Sharma stated that in order to avoid pitfalls creeping into the project reports, the cost estimate of the IDSMT pro-

ject should include the cost of preparation of the project report also. This could be even 20 to 30 per cent of the total project cost so that socio-economic, architectural, and other urban experts could especially be commissioned for preparation of project reports.

At this point of time, R.K. Wishwakarma highlighted the point raised by D.N. Khurana in his paper on the management of solid wastes which could not be presented by him in person. Wishwakarma urged the upon town planners preparing the plans for the IDSMT to indicate in the lay out plans sites for putting the dustbins, sites for sanitary landfill construction, of *dalaos*, etc. B.M. Naik stressed the need to take into account also the managerial feasibility of the project which happens to be the most important aspect of project formulation and implementation. It has been generally observed that though financial targets of the projects have been fulfilled, physical targets have lagged for behind. In order to correlate these two targets, he suggested to use project management techniques like PERT, CPM, etc.

A large number of delegates reacted to the paper presented by S.K. Sharma on housing the urban poor. They referred to the cluster approach advocated by Sharma and said that in such a scheme of things it becomes necessary that the prospective neighbours know each other so that the neighbourhood is transplanted on the new site in true sense of the term. It was generally felt that the cluster housing being tried in Bhopal looked beautiful having bright prospects as a cohesive neighbourhood and social environment.

Chandrasekhara referring to the urban informal sector felt that it would be erroneous to call every member of the informal sector as urban poor. They are hard working, innovative and hence their earnings are sometimes quite high. He, therefore, thought that approach to develop the informal sector has to be broadened.

SESSION III

Session III of the Seminar was devoted to "Political Ecology: Community Participation and Organisation for Plan Implementation". Covering a wide variety of themes on the

political culture and environment in small and medium towns to facilitate policy administration and decision making, greater stress was laid on community participation to combat the ills of politics of urban development. Community participation was discussed at length in the context of programme implementation and also for suggesting a suitable model of organisational framework for integrated development of small and medium towns. The session was chaired by C.S. Chandrasekhara, former Chief Planner, Town and Country Planning Organisation and Hony. Advisor to the National Institute of Urban Affairs.

Subscribing to the views of David Easton, S.N. Mishra, in his paper on "Political Process and Decision Making in Municipal Government: A Case Study" observed that the end product of the process of political system is the authoritative allocation of values for the entire society. He looked at municipality as a sub-system geared to solve the local problems through its major constituents, *viz.*, political leaders, officials and the masses. In order to deliver the goods, its constituents are expected to interact with one another and work in unison. Unfortunately, actuated by egoistic political culture, political leaders, in collusion with municipal officials, exploit the situation. Consequently, the benefits of development schemes have gone to the elite section of the society. As the masses exhibit the characteristics of subject culture and the benefits do not percolate to them, they are not responsive to development programmes. For the successful implementation of the programme of integrated development of small and medium towns, the needy and weaker sections of the society should not only be encouraged to participate in the decision making process in various ways as well as at different levels but also be stimulated to have their share in the benefits of development programmes.

K.L. Julka in his paper "People's Participation, Development Administration and the Integrated Development Programme" stressed the importance of people's participation in view of the long-term effects of the process of modernisation. He pointed out that planned intervention in this process is the *sine qua non* of integrated development. With a view to forestalling the dangers of bureaucratic elitism and totalita-

rianism, people's participation becomes imperative. Its importance cannot be overstressed in the wake of the moral degeneration of the present political leadership. As for small towns, he made out a case for the structural arrangement based on territorial and functional representations reconciling community issues with group interests in order to make people's participation more meaningful and effective. He pleaded for people's participation at different stages of the IDSMT programme: formulation, execution, monitoring and evaluation. He pointed out that such an arrangement would, through the process of political socialization, manifest and spin off a process of state and nation-building.

Vijay Laxmi Pandit presenting her paper "Participation in Development: Functions and Techniques" pointed out that the ideals of classical democracy set forth in Lincoln's celebrated definition do not rhyme with the Indian political reality as power is concentrated in the hands of a ruling class wedded to the maintenance of *status quo*. The lower class feels alienated because it lacks political consciousness, perspective and direction. Also, it is unorganised. With a view to stimulating people's participation in general and integrated development programmes in particular, the organisers should generate group discussion through the mass media. Pandit was too enthusiastic about mass participation and spoke at length of the need of involving poor people in the decision making process in the various programmes of the integrated scheme. She suggested that in order that the impact of the poor in participation might be felt, it is necessary to include them in the community action agencies. In fact today the masses do not know their rights. They should, therefore, be made conscious of their rights. This can be done only if the political leaders and the bureaucracy identify itself with the problems of the people in citizen culture.

P.T. Hardikar in his paper "Organisation for Plan Administration and Inter-Agency Coordination" contended that in order to bridge the hiatus between the formulation of a plan and its proper implementation, attention should be paid to inter-agency coordination. At the outset, he emphasised that the IDSMT programme should be credited with two main achievements: (a) it has made possible implementation of the

master plans, and (b) it has compelled the adoption of the new techniques in the implementation of plans. He further demonstrated that a harmonious coordination hinges on three elements: (i) a clear understanding of the precise objectives of the project related to the respective spheres of various authorities concerned; (ii) a detailed programming and scheduling of the project; and (iii) mutual respect among administrators, technicians, social scientists, politicians and the people. He said that coordination is more concerned with the frame of mind rather than with the mechanism.

Hardikar did not favour the idea of bringing all urban development activities under the umbrella of one super authority as it would result in inter agency friction. As the activities involved in urban development are of specialised and technical nature, what is needed is a change in orientation: the functions performed by various authorities, (municipal councils, autonomous functional authorities, state departments, etc.) should be looked at from the standpoint of division of labour rather than as fragmentation of functions. This implies coordination in terms of timing of activities to be taken up in series as per detailed scheduling. He was of the opinion that coordination could be achieved if: (i) the purpose of the creation of authority is understood; (ii) the objectives of the project and its components are understood, (iii) when, how and who should perform a particular task is clarified, and (iv) there must be an attitude of mutual respect of commitment to the task. Hardikar optimistically observed that the IDSMT programme, by generating employment opportunities in small and medium towns, will improve the financial position of municipal councils and, consequently, reduce its dependence on higher authorities. For the successful implementation of the programme, he put forward two proposals: (1) creation of the post of a full-time Project Manager, and (2) setting up of a monitoring, research and evaluation section which should prepare periodic reports ultimately forming a document to serve as a guide for future integrated development plans.

DISCUSSION

S.P. Verma exhorted that we should not be swept away by the romanticism about people's participation. As the formulation of a plan requires expertise, we should be realistic about the proper sphere of people's participation. What is immediately required is that municipalities which have either been dissolved or superseded should be brought to life again so that developmental activities should not suffer. Of course, it cannot be divorced from the political ecology that exists in the country.

E. Siliezar made a few observations on some of the papers presented at the seminar. Referring to S.K. Sharma's paper, he appreciated that the introduction of time dimension to the economic development of small and medium towns is very well taken care of taking in view the long term development perspective of the town. Speaking on people's participation, the political framework and the political process, he observed that we need formal, more than formal process of leadership. He further raised the question as to how to transmit the revised 20-point programme to the people and get the feedback. Obviously, he stressed the importance of communications to evoke people's participation. It may be through a 'power coach' or 'baniya' ethics. Commenting on Pandit's paper he observed that she has brought the subjective element in the political framework and people's participation and its dynamism. She spoke at length of the vigilance of the civil servant and vibrant growth centres. However, we should be more concerned about regional development.

Kirtee Shah appreciated the observations made by K.L. Julka and Vijay Laxmi Pandit who talked about the ultimate objective of participation and bringing about some kind of political awareness. He felt that Pandit's scheme of strengthening the participation of the masses and of the democratic institutions is a desirable objective. He raised the question "Is it really possible to avoid people's participation? Can these towns be developed by people other than the people themselves and by the resources other than the people's resources?" and answering these questions himself he observed

that neither we know the problems of people nor their solutions.

With a conviction reminiscent of Rousseau, Shah laid accent on the competence of the common man and pleaded for people's participation. He contended that the people not only understand their problems but also know their solutions. As the development of new attitudes and restructuring of institutions will take a long time, we should not wait. In order to provide solution to the massive and complex problems, we should seek people's participation and rely on their creativeness and innovation.

William J. Cousins commenting on the problems raised in the seminar observed that the level of discussion was higher than usually occurring in this kind of seminars. He posed the following questions for the consideration of the participants: (i) How to enhance the participation of people and what are the limits of people's participation? (ii) In view of the aims and objectives of the IDSMT programme, how should the funds be utilized flexibly to enhance the capacity of local bodies to plan and carry out development? (iii) Is there any practical and workable model?

P.R. Dubhashi, while making observations on the discussion of the third session, remarked that though people's participation has been discussed very extensively, it should have been in more concrete terms with reference to programme components (as given in the Guidelines) rather than being carried on in a generalised way. He further made a remark that popular participation is a function of objective analysis and study and there should not be any romanticism about people's participation in plan preparation which requires expertise. Otherwise, we may be treading on subjective elements which would weaken, dilute and deflect the intensive objective and the process of decision making.

He further observed that in the name of popular participation there are many people who go on introducing subjective ideas which are self-interesting views and which have been destroying the process of objective planning in the country. Planning means objectivity. If objectivity is eliminated by giving credence to interference and thus masquerading popular participation, we shall not be doing any justice to our pro-

gramme. So, let there not be any kind of simplistic idea of popular participation. There has to be a way of popular participation in terms of concrete proposals, a method, a process, and an institutional way of eliciting popular participation involving consultation of people. Let the plans be prepared on the basis of objective analysis of various factors involved.

Subscribing to the views of Rousseau about democracy being just an intermittent discussion, Dubhashi remarked that just after getting elected on the basis of some kind of technique, they themselves start calling the elected representatives of people. He expressed his doubts whether such elected people are the real representatives of an elected municipal body; though it is a precondition for popular participation. In the plan formulation of a local body, there should be consultative body consisting of educationists, economists, bankers, etc., along with the elected representatives. He stressed the importance of direct and informal communication with a view to ascertaining the actual views and requirements of the people.

Differing with Dubhashi's views on people's participation, Kirtee Shah strongly felt that participatory approach in development programmes could not be brushed aside on the flimsy ground of lack of wisdom in the citizenry. The basic reason behind ignoring the people lies in the value system and thinking of planners and administrators. Citing an example of plan prepared for the urban development of Ahmedabad, he said that in the name of people's participation, the citizens of Ahmedabad were given just two months to comment on the plan prepared! Even if the comments received from the people are compiled, one would definitely come across a better plan for Ahmedabad. The Government of Gujarat had, therefore, to accept the views expressed by the people. People's wisdom is thus already there.

He suggested that while talking of participation, one has to think of the levels of participation, the extent of participation, the elements of participation and the limits of participation. Participation is a question of inculcating faith in the common man's judgement and his wisdom for taking a decision about his own future.

Chairman C.S. Chandrasekhara concluded the session by

stating that a lot has to be done both in decision-making and decision-taking. He stressed the importance of group's participation in the integrated development of small and medium towns. ☐

CONCLUSIONS AND THEIR POLICY IMPLICATIONS

Session IV, the last session of the Seminar was devoted to arriving at the broad conclusions and the major outcome of the Seminar. The session was chaired by S.K. Sharma, Secretary to the Government of Madhya Pradesh, Department of Housing and Environment. Based on the Rapporteurs' report of the three technical sessions coordinated and presented by T.S. Papola, Director, Giri Institute of Development Studies, Kirtee Shah, Director, Ahmedabad Study Action Group, and K.L. Julka, Reader, Department of Political Science, Magadh University, the following conclusions were drawn which have their far reaching policy implications in the planning and designing of the integrated development schemes for the small and medium towns.

The two-day hectic debate and deliberations of the Seminar centred round the integrated development of small and medium towns in the backdrop of India's urbanisation which has been characterised by polarised urbanisation, wherein large and metropolitan cities have grown larger at the neglect of small and medium towns. The debate culminated with a general consensus that the IDSMT programme is a mechanism of providing a kind of buffer between the rural areas on the one hand from where a large number of migrants flock towards metropolitan cities, and the metropolitan cities and the metropolitan cities on the other, which are becoming over crowded with all its consequent problems. This programme has, therefore, been evolved to minimise migration to the metropolitan cities in order to provide an orderly development. Reviewing the experience of this programme, several questions were raised; some of these touched upon the very concept of 'integration' of this programme, as

it has been envisaged. It was, therefore, suggested that 'integration' should mean integration of objectives among activities, of activities among the sectors, and of the towns with the hinterland, in terms of linkages.

Questions were also raised regarding selection of the towns for the IDSMT programme. It was suggested that greater emphasis should be given to the potentialities of a town for becoming a growth centre. An extreme suggestion put forth was to include all the small and medium towns within the IDSMT programme. However, it was not considered to be feasible because of financial constraints and the constraint of lack of preparedness of all the towns to adopt this kind of change. It was, nevertheless, felt that the existing population limit needs to be given a rethinking to include higher size-groups of towns which are more viable and self-sustaining.

It was felt that the project reports submitted for some of the towns in various states give an impression that there has not been adequate appreciation of all the implications of the programme. The 'guidelines' which in itself were treated to be imperfect by some, and 'near perfect' by others, have not been followed in its true spirit. It was agreed that given the 'guidelines', the kind of projects so far prepared and in operation do not demonstrate an adequate understanding of the basic objectives and implications of the IDSMT programme. A proper understanding of integrated approach is totally lacking in the formulated projects. Doubt was also raised on the validity of having the same kind of components in the guidelines for all kinds of towns in all types of regions. It would be prudent to introduce some amount of flexibility in project formulation and give more freedom to the planners of the small and medium towns in the states to prepare relevant development schemes best suited and conducive to the total environment of the town.

It was noted that the project reports so far formulated, at the most, envisage the mere provision and improvement of services in the small towns; they lack the necessary integration of the town with its hinterlands and objectives with activity sectors for their inter-activity linkages and multi-level convergence over the space. Regional planning and regional

development, the perspective in which the IDSMT programme has been conceived, is found to be grossly lacking in the project reports so far submitted for execution. It was also considered to be too ambitious to talk of regional development and integration of the towns with their hinterlands with the existing small financial assistance. However, the central financial assistance was viewed to supplement the existing resources and the already on-going effort in some of the small and medium towns for their development. The IDSMT programme could be viewed to provide more effective way of bringing about integrated development only in such towns which already have their own urban development plans or master plans under implementation. In such towns central assistance under the programme of the IDSMT is found to be handy in facilitating the development effort as has been observed in Kerala. The towns which did not have any kind of development plan, have not been able to make the best use of the central assistance that was made available. It was agreed that this is an important lesson to be learnt because if the towns are not going to be planned for the type of development desirable for them, the paltry sum of financial assistance might not be effectively utilised.

Even though there are already urban development plans prepared for the development of small and medium towns *per se*, the question of linkages of the towns with their hinterland for fostering regional development has not received due importance in the various project reports. This is an important aspect of the overall development itself and not much evidence came forward to suggest that anything significant has been done in terms of the integration of its hinterland. This has to be kept in mind while preparing future development plans.

It was emphasised that development of small towns as part of the overall development of the region has to be the ultimate objective. In order to achieve this goal there has to be a conscious phasing of the entire programme. This becomes all the more important in view of the financial constraints and, therefore, it has to follow some kind of phasing. In the first phase, probably the humble effort should be simply to upgrade the level of services. The second phase could be

devoted to a much better integrated development of the town by integrating various sectoral programmes at the town level. In the third stage, one could think of development of the town as an integral part of the overall regional development plan. If these three phases could be taken up as important links in the chain of development process, it might yield results even in the first phase itself. It was emphasised that, after all, the integrated development of small and medium towns is not a one time programme; rather, it is a dynamic and continuing process. There is to be a proper phasing of the programme keeping in view the perspective and the direction and dynamics of development.

The relationship of the IDSMT programme and the anti-poverty programme also received the attention of the seminar and it was debated extensively. But it was very well clarified that this programme in itself is not an anti-poverty programme. Unlike an anti-poverty programme which tries to redistribute income, this particular programme is directed to and concerned with the redistribution of population and services. Nevertheless, it does contain certain elements which can make it more and more poor-oriented; say for example, the orientation of housing programme, supply of potable water, etc., towards subserving the needs of the urban poor. In this context, it was particularly pointed out that the process of physical planning seems to go against the urban poor. It was felt and agreed upon that physical planning in India was heavily loaded against the urban poor. It was, therefore, suggested that in any kind of programme including the IDSMT, utmost care should be taken to ensure that physical planning is not loaded primarily against the poor and in favour of the rich. But the question was raised that even though the programmes are oriented for the poor, do we have the mechanism either in the form of committed bureaucracy or organisation which could make it amenable for the poor? No conclusion could be reached on this point. However, it was agreed upon that effective and greater participation of people in the programmes could ensure its orientation towards the poor and weaker sections of the society.

It was also advocated that the funds earmarked for this

programme are not really substantial for the effectuation of the programme objectives. Both the central assistance and the state contribution for this programme were said to be meagre. Scarcity of resources especially at the local level was one of the central point which was emphasised again and again. It was also mentioned that the expertise, equipments and organisation are also the other constraints at the local level hampering the preparation of better project report and its execution. It, therefore, calls for strengthening of organisations at the local level in terms of expertise, equipments, finance, etc. Finances being the major constraint, it was suggested to utilise institutional finance to a much larger extent for the various types of schemes envisaged under the integrated development of small and medium towns.

Although there was a consensus regarding the inadequacy of funds, the progress of IDSMT programme was also reviewed in terms of utilisation of the central assistance by the various state governments and it was pointed out that while programme is almost half-way through, only 20 per cent of the funds have been utilised. Therefore, there should be a more rational allocation of resources based on the need and capability of the respective towns. Slow progress of this programme was mentioned to be because of impediments—administrative, technical and financial in nature. These need to be rectified to provide momentum to this programme in achieving the objectives.

Fiscal mismatch at the local level was widely discussed. The project after its completion can be sustained only if resource base of the local bodies which have to maintain the projects are adequately strengthened. This requires a major change in the existing policies and practices regarding the urban local bodies. However, in the short run, financial capability of the civic bodies could be enhanced marginally by providing a proper mix of commercial projects in the total development programme for the various towns. The return from commercial projects could be utilised by the municipal authorities. It was also suggested to rope-in various agencies concerned with the sectoral programmes to be integrated with this programme along with their schemetic budget for

pooling resources. This would ease the financial constraints to a large extent.

It was also thought to be imperative to strengthen the economic base of small and medium towns, if these towns have to act as alternative focal points of development and employment opportunities. In order to do so, it was suggested to encourage the urban informal sector and particularly tertiary sector in the small and medium towns. But as these sectors cannot be promoted in vacuum, there should be at least a modest attempt to promote industrial estates and small scale enterprises best suited to the type of economy and functional needs and specialisation of the towns' hinterland. This might trigger-off and accentuate autonomous development of both the informal and tertiary sectors which needs support and guided direction for its growth by positive planned intervention. In order to promote small scale enterprises in the informal sector including the tertiary group, the financing agencies such as State Finance Corporations, State Industrial Development Corporations, etc., should encourage the development of these sectors in the small and medium towns by extending facilities of loan and technical advice. Licensing policy needs to be used both as an incentive for the development of small and medium towns and also as disincentive to prevent excessive growth of larger towns and cities.

With a view to provide a quality of life and environmental hygiene to its citizens and to make the IDSMT programme a really integrated programme, environmental sanitation and management of solid wastes need to be incorporated in the project reports as an important and vital component as the insanitary unhygienic disposal of solid wastes is rampant in almost all the small and medium towns. It was, therefore, pointed out that the central government should make it an obligatory condition for all the project reports, to have a separate chapter on environmental sanitation and solid wastes management and the central assistance should also be given for this.

It was again and again emphasised to search for low cost solution for promoting environmental sanitation. Such low cost solutions for the collection, storage, transport-

tation and disposal of solid wastes were also suggested. It was pointed out that the open drains system of disposing the solid wastes is unhygienic and needs to be replaced by sanitary land fill. This was said to be the first low cost important priority area which must be looked into while preparing plans and projects for the small and medium towns. Composting of the wastes should also be increasingly tried as a low cost solution and also as a device to have the economic return. Semi-mechanical system of composting was thought to be a cost reducing device and best suited for the small and medium towns. It was also suggested that suitable sites for dumping of solid wastes should be properly provided in the lay out plan of the project, for, it has been observed that sites for dalaos at convenient locations have not been provided even in the newly planned areas of the metropolitan cities. As regards the disposal of human excreta, the low cost solution evolved by the Patna based Sulabh-International was advocated to be replicated in the small and medium towns. Technical solutions for the problem of environmental sanitation apart, a great deal of emphasis was laid on the public relations job to educate the people for keeping the towns clean and livable and to ensure their cooperation in environmental sanitation.

The low-cost solution for housing the urban poor was also suggested. It was stressed and cautioned that while planning for the urban poor, low-cost solution should not be at the expense of the quality of life. Low cost solution with enhanced quality of life can be feasible if proper thinking goes in the process of planning and layout plans, and if there is a better appreciation and understanding of peoples' life styles.

In the implementation of integrated development of small and medium town, politics of urban development at the local level was discussed quite at length and it was pointed out that in order to have a better and objective decision making process, three inevitable organs of local government—political leaders, officials and the local citizenry should act in perfect unison so as to permit percolation of the fruits of development and growth to all sections of the society.

Unfortunately, a collaboration of politicians and the bureaucracy often results in deprivation of the urban poor from

sharing the fruits of development. In view of this, it was strongly felt to encourage participatory approach to urban development. It was also suggested to reactivate the urban local authorities by bringing their prolonged supersession to an end and making them elected bodies. People's participation was suggested to be promoted at three stages of the IDSMT programme: formulation; execution; monitoring and evaluation. But people's participation has to be thought of in terms of the levels of participation, the extent of participation, the elements of participation, and also the limits of participation. Alongwith the views of the local populace, the project formulators should also invite the views of the local academics, bankers and industrialists in formulating the project reports.

The IDSMT programme based on an integrated approach, is a multi-sector programme involving multiple departments and authorities. Successful execution of the programme, therefore, depends upon a coordinated effort of all the agencies, departments and authorities associated with sectoral programmes. Inter-agency coordination has to be built into the project report by phasing and scheduling the envisaged programmes and making the agencies responsible and accountable for execution of the scheduled programmes in their respective functional domains. It was also suggested to have full time project manager for expeditious execution of the project. The project manager should constantly monitor and evaluate the progress in implementation and should take up timely corrective measures to remove any lag in the execution of projects. □



PART II

TECHNICAL PAPERS

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS IN INDIA'S URBAN CONTEXT: PROBLEMS AND PROSPECTS

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SMALL TOWNS IN INDIAN URBAN CONTEXT

In the post-independence era, large cities of India grew in an extraordinary manner whereas small and medium towns either remained stagnant or registered very modest growth. Some even declined. At the same time, migration from rural areas not only increased but started by-passing the small towns. According to 1981 census, India's urban population is over 156 million (156,188,507) or about 23.7 per cent of the total population. This is distributed over 3,245 urban places: 57.37 per cent in 216 class I cities and the remaining 39.63 per cent in small and medium towns of less than one lakh population. Of the 216 class I cities, 12 cities have populations of one million and above.¹ As the cities and metropolitan areas were assuming unmanageable proportions, they attracted the attention of many students of urbanisation. Barbara Ward, for instance, observed:

The urban order is destined to absorb a higher and higher proportion of the world's people. The point is to diversify that order, to slow down by positive measures the rural exodus, to build up intermediate centres, to see to it that in no country does over half the population congregate in the capital city. The need must be faced, if necessary to

¹*Census of India, 1981, Provisional Population Totals, Paper 2.*

use disincentives to reduce and redirect the rural flow away from the biggest concentrations.²

BARBARA WARD
—*The Home of Man*

Although urbanisation in a developing country is nothing unusual, rather it is to be expected; it is the manner it is shaping itself, which has caused deep concern to many involved in the study of urbanisation process in the context of national development. Although a small group of students of planning have been trying to draw the attention to its implications, yet urbanisation as a phenomenon has not been recognised by the policy makers at the national level. The result being that in the last three decades since India attained independence, there has been a steady drift towards large urban agglomerations which, in turn has accentuated the regional disparities besides creating a host of problems for a handful of our larger cities. The need to take into account urbanisation as part of India's modernisation process has been pleaded by many scholars and thinkers.

Of late, there has been an increasing concern to give more attention to the development of small and medium towns. But, as early as 1960s, several planners in India and abroad had pointed out the feasibility of according concerted attention to an increasing role of small and medium towns in shaping India's urban future. During the decade of the sixties' for example, John P. Lewis in his *Quiet Crisis in India* wondered why Indian urbanisation must necessarily follow the examples of the industrial West where urbanisation was basically keyed to a few metropolitan cities of gigantic proportions? Lewis warned against "full-blown metropolitan agglomeration" which would not only be an "appalling destination for India", but also an 'unnecessary one'. On the other hand, he thought "there are greater capacities for mobilising idle rural manpower advantageously, if industrialisation is decentralised..." Lewis, in fact, suggested that towns in the 20,000—300,000 range "offer the most congenial physical setting for a synthesis between the traditional rural and the western-urban strands of contemporary Indian cul-

²Barbara Ward, *The Home of Man*, London, Pelican, 1976, p. 190.

ture". Given the diversities of India and great differences in regional development, could not India's urbanisation be based on a large number of small and medium size towns? He even arranged what was perhaps the first seminar on this subject at Bangalore in 1965.

With a view to restrain the rate of migration to metropolitan cities and to promote growth of small and medium towns in order to enable them to act as "growth and services centres" for the rural hinterland, it is necessary that increased investments on the provision of infrastructure and other essential facilities are made in these small and medium towns. Lewis also emphasised the importance of spatial dimension in any development plan. Although he agreed that India has been a leader among the governments of economically underdeveloped countries in the field of 'regional development', he felt that Indian authorities have given very little "concerted thought and effort to the spatial dimensions of their development design", particularly to the transformation of the economic pattern into "geographical sectoring and/or centering". According to Lewis, India's planning exercises carry great potentials in this direction and "include the opportunity for making the most constructive and novel contribution to the world's fund of development alternatives that is within India's capacity to make" and yet, "this chance is a comparatively fleeting one, probably it will have been either seized or missed before this decade is over."³

PM'S TASK FORCE ON SMALL AND MEDIUM TOWNS

In response to the repeated urgings of the planners, the Prime Minister set up a special Task Force (October, 1975) to study the problems of small and medium towns and to suggest appropriate policies for their proper development in the national and regional context and to ensure that such towns are made to play a significant role in the country's development and share a larger part of urbanisation.

The Report of the Task Force published in 1977

³John P. Lewis, *The Quiet Crisis in India*, Washington, DC, The Brookings Institution, 1962, pp. 167-201.

established a clear need to consider the entire system of human settlements—villages, towns, cities and metro-centres—as a ‘single issue’ and to work towards a balanced spatial pattern “by assigning a reasonable share of the socio-economic overheads to the whole range of them.”⁴ It was thought that such an integrated effort would help in a wider distribution of developmental foci, leading to increased well-being of the people. The Task Force suggested a multipronged approach and emphasised that “action should be synchronous in various areas if the contemporary evils of urbanisation have to be mitigated.”⁵ Among other things, the Task Force suggested a greater degree of attention to be given to the existing cities within a population range between 50,000 to 300,000. This was specially to be noted while pursuing goals of industrial decentralisation.⁶

As a prerequisite to ensure proper selection and development of the small and medium towns, the Task Force identified the following imperatives:⁷

- (a) formulation of a national urban policy,
- (b) urban land policy to ensure proper use of land and prevention of wastage,
- (c) development of small and medium cities and metropolises with organic linkages to the areas around,
- (d) identification of growth points in the regions that may be delineated,
- (e) evolution of location policies in the context of regional development,
- (f) provision of an inviolable green-belt around settlements of certain size,
- (g) working out of rational and workable norms and standards of urban development, and
- (h) creation of appropriate statutory local government agencies at various levels.

⁴Government of India. Ministry of Works and Housing, Report of the Task Force, *Planning and Development of Small and Medium Towns and Cities*, Volume I, p. 86.

⁵*Ibid.*, p. 86.

⁶*Ibid.*, p. 87.

⁷*Ibid.*, pp. 87-88.

Apart from defining the above imperatives, the Task Force stressed the need to supplement the national population policy by a "national population distribution policy" directly linked to the system of human habitat.⁸ It stated that in order to attain the national goals regarding mobilisation of human and natural resources, "a resource inventory of both habitable and non-habitable regions should be prepared". It was indeed the first indication for organising an urban and regional information system. "If the resource mobilisation is linked to spatial planning, it would contribute to the development of small and medium towns."⁹ Accordingly, policy on industrial location and licensing needs to be oriented towards securing the national goals enunciated for the proper and balanced development of urban areas in the country, with a view to absorb significant labour force. The report stressed "integrated sectoral development with the system of human settlements should form the base for urbanisation"¹⁰.

Perhaps the single most pertinent factor towards securing proper development of towns and cities is a well-conceived urban land policy for various types of communities, be they big or small. And this policy should cover not only acquisition and development of land but, even more so, ensure an equitable disposal of land to subserve the larger social needs. The Task Force suggested enunciation of "national guidelines for the formulation of suitable land policies to be adopted by the various state governments and union territories" to be worked out taking into account the significant differences and diversities of the situation obtaining in various regions of India. In order to provide the requisite financial resources for development of small and medium towns, the Task Force recommended setting up of an Urban Development Finance Corporation at the state level—somewhat on the lines of Kerala Corporation. It even explored a number of useful possibilities for the reorganisation of the local government to help further the goals of inter-related system of human settlements.¹¹

Finally, the Task Force recommended that a separate de-

⁸Government of India, Ministry of Works and Housing, Report of the Task Force, *op. cit.*, p. 89.

⁹*Ibid.*, p. 90.

¹⁰*Ibid.*, pp. 91 and 93-94.

¹¹*Ibid.*, p. 95.

partment at the state level responsible for the management, administration and, above all, for the planning and development of human settlements in each state should be created. This department would, among other things, include local-self administration as, also, local planning and urban and regional development. In this scheme of things, the various state town and country planning departments were to be given a 'pivotal position' to be able to advise all concerned departments of the state government dealing with various aspects of development planning.¹²

During the Sixth Five Year Plan, at long last, the central government formulated a centrally sponsored scheme for the integrated development of small and medium towns—IDSMT—which this paper attempts to review.

The Sixth Plan, initially commenced during 1979-80, has a provision of Rs. 96 crores to assist the state governments for the centrally sponsored scheme of "integrated development of small and medium towns (IDSMT)". Guidelines were laid by the Government of India for the formulation of the project reports by the state governments for each town to be covered under the scheme. The towns defined under the scheme were those which had a population of less than one lakh as per 1971 census. Total number of towns to be covered during the Sixth Plan is 231, while the maximum central assistance is of Rs. 40 lakhs for each town. The number of towns for development under this programme for each state/union territory has been decided on the basis of the plan provision.

IDSMT COMPONENTS

Before framing the guidelines, the TCPO laid considerable emphasis on the careful selection of towns for inclusion in the scheme. The underlying idea being that selected towns should form an integral part of the overall development strategy envisaged for the particular state/union territory. Secondly, the TCPO suggested that while selecting these towns, to make the project really an integrated one, proper care

¹²Government of India, Ministry of Works and Housing, Report of the Task Force, *op. cit.*, p. 96.

should be taken to identify:

- (a) the natural endowments of the given town in the form of river-fronts, waterbodies, lakes, hilly features, etc.
- (b) the historical heritage of the towns reposed in its urban or community forms or historical/monumental structures;
- (c) attention must be given to improve the overall environment of the towns and special emphasis to be accorded to developing "open green spaces".

Nevertheless, due to certain limitations and paucity of funds, all the above items could not be included in the guidelines issued by the ministry: the selection of the towns was also left entirely to the state governments.

In accordance with the guidelines issued by the ministry, every town for inclusion under the IDSMT scheme should have two components—Part A and Part B; only the schemes under Part A are eligible for central assistance on 50 per cent matching basis, the maximum central assistance being limited to Rs. 40 lakhs for any one town. The component includes:

- (i) land acquisition and development for residential schemes will include sites and services with or without core housing;
- (ii) traffic and transportation to subserve the shelter and employment-project and could include construction of roads, intersection improvements/upgradation including widening of existing roads; also to provide for bus terminals;
- (iii) development of mandis/markets, provision of industrial estates, other services and processing facilities for the benefit of the agricultural and rural development in the hinterland.

Part B components are to be financed completely by the state and local bodies and together they should form an integral part of the entire scheme. Emphasis will be on the improvement of the slum areas, augmentation of infrastructural facilities and other civic amenities in the town. Thus,

the objectives of the centrally sponsored scheme (IDSMT) are two-fold: to restrain migration of rural population to big cities/towns, and promote the development of rural hinterland.

THE IDSMT PROGRAMME

The scheme was launched during 1979-80 with some zeal and enthusiasm. It was expected that the state government would be approaching the central government for assistance eagerly because in the past, there was hardly any scheme for the development of small or medium towns. The initial response was nonetheless modest. In the first year only 31 towns were taken up for central assistance and Rs. 225 lakhs were released. In the second year, 1980-81, it was better than the preceding one but still, far below expectations: only 90 new projects (towns) could be approved for which Rs. 900 lakhs was released as the first instalment. The end of third year is approaching but so far, another 47 new towns could be included under the scheme and the release of financial assistance is also not too encouraging. This portrait of the slow progress is evident when looked from the picture of actual physical progress of the approved schemes. Very few towns (only seven) have so far approached for release of the second instalment as in most cases, the first instalment released even as long back as in 1979-80 has not been fully utilised.

Looking at the number of towns so far covered, the actual release of funds, and a review of some towns, the progress of the IDSMT schemes does not seem to be satisfactory. Several states and union territories have yet to make a beginning: Jammu and Kashmir, Meghalaya, Nagaland, Union Territory of Andaman and Nicobar Islands, Lakshadweep, Arunachal, Mizoram, Dadra and Nagar Haveli are all in this category. These states have yet to appear on the IDSMT map.

The surveys and reviews conducted by TCPO about the performance of the IDSMT projects in various states indicate that there are certain fundamental problems and inherent constraints hindering the progress. After three years of operation, some points need to be mentioned. These are described

in two sets:

- (a) Problems and constraints faced during the pre-approval period of the projects;
- (b) problems and constraints faced during post-approval or execution period of the projects.

These two broad categories are elaborated below.

PROJECT FORMULATION PROBLEMS

Before the project gets formulated by the state governments, certain steps have to be initiated for the selection of towns on priority basis, considering the overall urban development strategy for the given state and the number of towns allocated to the state. The project formulation should also include financial provisions in the state budget (Part A as well as Part B of the *Guidelines*). Finally, the projects have to be submitted to the central government for the appraisal and allocation of funds.

Pre-Appraisal Problems

In some states the selection of towns seems to have been affected by extraneous considerations, not related with the policies and strategies of urban planning and regional development. Interestingly, some states are now desirous of substituting earlier approved towns (under IDSMT) by some new or alternate towns without giving convincing reasons. This rather whimsical decision has left out many potential and needy towns unattended. Some towns of scenic beauty, having potential of becoming tourist centres have also been left out. The ultimate result of leaving the selection of towns to the states is that selection is often not logical and too often it causes delay in project formulation as well. What was expected was a rational basis for the selection of towns and subservience to the states' overall goals for urban and regional development. Unfortunately, this has not taken place.

Project Formulation

After the selection of a town, the next step is to formulate

a feasible package or mix of projects which should help trigger off self-sustaining growth in the town. The actual projects which are to be part of the integrated development of a given town should be according to the prescribed guidelines as laid down by the ministry. Many states, (mainly the north and the north-eastern hilly states and most of the union territories) do not have adequate planning expertise to formulate proper projects. In many states, it has been left to the municipalities which as a rule, neither have the manpower nor are technically equipped and financially sound to engage the requisite planning personnel. Many towns also do not have any development plan or master plans either. Absence of development plan/master plans has been posing problems in selecting a proper mix of schemes for such towns. Very often quite arbitrary items not related with real problems of the town are included in the project reports. The state governments further add to the problem by not making necessary financial provisions in their budget particularly for the Part B schemes. Budget provision for Part A as well as Part B schemes is a prerequisite for approval. All these aspects lead to the delayed completion of the project formulation work and subsequently, delayed submission and execution as well. This is probably the main reason why very few projects were approved during 1979-80; but whichever were approved on the basis of the tentative programmes have not been effectuated on the ground. Requests for second instalment are few.

Submission of the Project Reports

This is of the nature of an administrative impediment. After the project is formulated, the concerned agency has to route it through the appropriate authority of the state government. The whole procedure takes time which again results in belated submissions and subsequently, belated commencement of the execution work. This has happened in case of many towns.

POST-APPROVAL PROBLEMS AND CONSTRAINTS

Post-approval problems and constraints are of utmost

importance as these affect the actual execution and often can adversely affect the anticipated outcome envisaged for a given town. The following observations are worth mentioning:

- (i) After the approval of the project, the funds are to be routed again through state governments, which in many cases have not even transferred the central assistance to implementing agency or the municipality in time, though the time prescribed in the guidelines is one month.
- (ii) The matching contribution by the state governments, on the one hand, is released very late and, on the other, does not match the central assistance with which it is required to be equated. This aspect either results in delayed commencement of the project or puts undue strain on the meagre finances of the implementing agencies. In most cases the municipalities have little or no funds especially in case of small and medium towns. This again affects the execution.
- (iii) Land acquisition is another hurdle as most towns do not have any land in reserve at locations where it could be put to use, especially in those towns for which development plan/master plan have not been prepared. The administrative procedures for land acquisition involves too much time and, if some litigation is started, land acquisition is further delayed. In many cases, it has so happened that land acquisition problem has forced the implementing agencies to change the scheme or at least the site which again involves fresh formulation of a project/schemes, sometimes requiring another approval causing delay in the process.
- (iv) In several cases, after the project has been approved by the central government, the implementing agency has changed priority of the schemes and has approached the central government for allowing it to do so. This procedure again consumes lot of time. It also indicates that during the process of project formulation either the schemes were not selected properly, or some external forces have intervened to change the schemes.

- (v) Delayed execution has also been caused by the factor of cost escalation. By the time the project is approved, the cost of the schemes would have gone up and implementing agencies face additional problems. Delay takes its own toll.

There are certain other points as well which hinder the progress of IDSMT schemes. For example, some small towns for which projects have been approved, find it difficult "to digest the expenditure" of even Rs. 1 crore, leave alone schemes under Part B. This problem has been raised by the state of Tamil Nadu. In some cases, very small towns have been selected for development which have come forward with small outlays for approval. This way number of towns are increased but the extent of fund utilization is reduced which otherwise could have been utilised for some other town with greater 'absorption capacity'.

Last, but not the least, the amount of central assistance and official bindings can itself be a constraint. For an amount of Rs. 40 lakhs for one town, the state government or the municipality has to undergo formidable formalities which, sometimes, many municipalities try to avoid altogether by not coming up with their proposals. Moreover, the state governments have to commit much more for getting central assistance, sometimes involving budgetary changes as well. Some state governments may not be in a position to do so and to avoid this, they do not come forward with any project proposals, for example, West Bengal and Jammu and Kashmir.

The TCPO has envisaged the developmental programme in four distinctive stages. These are: *Pre-appraisal* stage, regarding assessment of problems of the given towns and project formulation of the same; the second is the *Project appraisal* stage; third stage is *Monitoring* and finally, the fourth is the *Evaluation* stage, to assess the overall impact of the project on the given towns. The TCPO is of the firm opinion that given the locations of these towns spread all over the country careful project formulation is the most important requisite to create the necessary impact on the hinterland of the towns.

if the objectives of the guidelines are to be faithfully adhered to.

Although general guidelines have been issued, it is not readily recognised that each of the towns and its programme should be tailored in accordance with its peculiar needs and circumstances. This is to recognise not only the terrain and topography and its general location *vis-a-vis* other cities and towns, but also the socio-cultural differences and the actual problems faced by a given town need to be taken up under the scheme. A town may consist of a significant proportion of a backward community or may be a declining town; or it could be one of the fast-growing settlements requiring immediate attention to control haphazard development. With a view to enable these towns to function in the regional context and/or to help in fostering agricultural/rural development, it is essential to keep these characteristics in view at the project formulation stage, as also to trace the progress of the projects throughout its effectuation. After all, it is not an easy task "to change the trends", to work towards a new deflection from the conventional drift and established migration streams. As Barbara Ward suggested, "a sustained, rational, well-planned urban strategy" together with a well-conceived and well-adjusted urban land policy is required. But for the ultimate success of any developmental effort not only well-conceived and well-planned strategies are required, more importantly, well-directed execution and effective implementation must take place. As Lewis puts it, "The Indians are better talkers than doers, better planners than executors. Their very erudition means that they already have heard everything—and tried very nearly everything, after a fashion. But too often the execution is half-hearted, inept or bogged down in cross-purposes. As a result, there is a rapid deterioration of good policy ideas; they grow shabby before their time." With the initiation of the integrated development of small and medium towns programme, it is to be hoped that a more effective implementation will take place, as the success of many policies at national and regional level depends directly or indirectly on the success of this programme. □

REVIEW AND IMPLEMENTATION OF IDSMT SCHEME

P.S.A. SUNDARAM

The Government of India introduced a centrally sponsored scheme for the integrated development of small and medium towns during 1979-80 as per the decision of the National Development Council. The objective was to develop the small and medium towns both in order to reduce the rate of migration to larger cities and to support the development in the rural hinterland. The guidelines of the scheme were circulated amongst different states and union territories in December, 1979 and state governments were requested to forward project reports according to the guidelines to the ministry of works and housing. The scheme has been continued during the Sixth Five Year Plan with the plan provision of Rs. 90 crores in the central sector, to be supplemented by matching provision in the budgets of the state governments and implementing agencies.

The Plan document states that the thrust of the urbanisation policy during the next decade would be to give greater emphasis on the provision of adequate infrastructural and other facilities in the small and medium towns and to equip them to serve as growth and service centres for the rural hinterland. For this purpose, increased investments are proposed in these towns in housing, water supply and communication facilities, and facilities for education, medical care and recreation will need to be augmented. It is also suggested that positive inducements should be given for setting up new industries and other commercial and professional establish-

ments in small and medium towns. These could include appropriate concessions in respect of capital expenditures on housing, schools, entertainment facilities, power, water supply, sanitation and drainage. Power, telephone and telex connections must be improved in these towns. The centrally sponsored scheme is a part of the balanced approach advocated in order to ensure an orderly process of urbanisation.

COVERAGE AND PROGRAMME COMPONENTS

The scheme covers towns with the population up to one lakh according to 1971 census. The state governments and union territories have been advised to give preference to district headquarters, sub-divisional headquarters and taluka headquarters, mandi towns and other growth centres while selecting towns. Due regard should be given to the regional importance of the towns, the rate of growth of the population and its potential for development. Taking into account 31 towns approved during 1979-80, it is envisaged that 231 towns would be taken up for integrated development and projects would be completed by the end of this plan period. The towns have been distributed amongst the different states and union territories according to the proportion which the urban population of the state bears to the total urban population in 1971.

The integrated plan would include components eligible for central assistance as also those to be taken up under the state plan. The items eligible for assistance in the central sector on matching basis include land acquisition and development, including sites and services with or without core housing, traffic and transportation to subserve shelter and employment projects and will include construction of roads and upgradation of existing roads (but not the purchase of vehicles), development of markets and mandis, industrial estates, provision of other facilities, processing facilities for the development in the rural hinterland.

The components for which funds are to be found in the state plan but which must form part of the integrated development, are slum improvement, urban renewal, small scale employment generation, sewerage, drainage and sani-

tation, medical facilities, schools, parks and playgrounds, assistance for making modifications in city master plan to permit maximum land-use.

SERVICE STANDARDS

It is emphasised that intensive efforts should be made to lower the standard so as to maximise the coverage. The state governments should identify agencies to prepare and implement the programme and take steps to strengthen the organisational set-up of the local implementing agencies. Monitoring committees have been suggested for constitution at state and local levels to monitor the progress at local level. Particular attention is to be paid for the maintenance of facilities created under the scheme through adequate provision in the budget of the local agencies.

CAPITAL BUDGETING FOR URBAN DEVELOPMENT

It was emphasised that the state governments should prepare a capital budget for urban development programmes in each town and make this a part of the urban development plan for the whole state, which will in turn be linked to the plan of the state. The attempt should be to pool together all the sectoral funds available for urban development.

Generally the cost of the approved projects may not exceed Rs. 1 crore, and the central government will provide assistance in the form of loan to the extent of 50 per cent of the cost or Rs. 40 lakhs, whichever is less. The remaining funds will be provided by the state governments and implementing agencies. The central loan will carry an interest rate of 6.5 per cent with rebate of $\frac{1}{4}$ per cent for timely payment. It will be repayable in 25 years including a moratorium of 5 years on principal. It is expected that the central assistance is passed on to the implementing agencies promptly on the same terms. The state governments generally pass on their contribution at a higher rate of interest but with a mix of grant and loan and the pattern varies from state to state. While the first instalment is generally released in advance on the basis of scrutiny of the schemes, the second instalment is released only

after the full utilisation of the first instalment together with the matching share and fuller details about the various aspects of implementation.

The project reports are appraised by the town and country planning organisation under the ministry of works and housing, and submitted for consideration by a sanctioning committee under the chairmanship of secretary, ministry of works and housing with representatives from ministry of finance, and the Planning Commission. Periodic reports on the physical and financial progress of the schemes are obtained by the town and country planning organisation (TCPO) and the progress of the projects are reviewed by the committee as also by the officers of the ministry and TCPO during their visits to different states. The progress of the projects has been discussed in meetings of the ministers for housing and urban development held in December 1980 and February, 1982. In both the meetings, it was resolved that all possible efforts should be made by the state governments to accelerate the implementation of the scheme and ensure the integrated development of the selected towns.

By the end of January, 1982, 162 project reports were approved and a loan assistance of Rs. 15.40 crores was released. The full quota of towns allotted to the following states have been approved by the central government.

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| (i) Assam | (v) Pondicherry |
| (ii) Kerala | (vi) Sikkim |
| (iii) Rajasthan | (vii) Tripura |
| (iv) Goa | |

Most of the projects have been sanctioned in respect of the following states.

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| (i) Gujarat | (v) Orissa |
| (ii) Haryana | (vi) Tamil Nadu |
| (iii) Maharashtra | (vii) Uttar Pradesh |
| (iv) Punjab | |

Efforts are being made to pursue the remaining states for forwarding project reports in order that the projects in res-

pect of all the 231 towns may be approved and implementation commenced as early as possible. Special assistance in respect of the north eastern states has been offered for formulation of projects by the housing and urban development corporation (HUDCO) and the TCPO.

REVIEW OF IMPLEMENTATION

The following features of the operation of the schemes have been revealed as a result of the review of the scheme done by the ministry and the TCPO:

- (i) Only a few states have undertaken a systematic exercise for the identification of towns to be taken up under the scheme with reference to the guidelines. The Government of Gujarat, for example, appointed a committee to examine the whole question of the development of small and medium towns and selection was done on the basis of the criteria evolved. The Town Planning Department of Tamil Nadu prepared a total urban development plan identifying the regional growth centres in different parts of the state on the basis of which the selection of towns was made. In the case of some states, apart from the *ad hoc* nature of the selection of towns, identification of the schemes to be taken up for central assistance was not preceded by a detailed analysis of the role of the towns in the context of the district and in the context of the different functions being performed within the towns. The schemes generally followed a stereo-type pattern such as development of land for residential and commercial purposes, improvement of roads, shopping centres and improvement of bus stands. The schemes were generally formulated by the director of town planning at the state level after nominal consultation with the local agencies, and the local officers including the collector were not involved in the detailed formulation. This often resulted in a change in the scope of the project or its location or sometimes even its abandonment after the project was approved. It also created difficulties

in identifying the agencies who should be entrusted with the actual execution of approved schemes. These difficulties were perhaps encountered in the context of the need to forward project report quickly for consideration of the central government in order to obtain central assistance. Perhaps the procedure for selection of the towns and for identifying schemes could be made more systematic and based more upon inter-agency consultation at state and local level during the remaining years of the Plan. Specifically, the state agencies responsible for location of industrial and commercial activities, agro-industries and socio-economic facilities could be persuaded to tie up their investment with the provision of infrastructure in the selected towns.

- (ii) It has not been sufficiently appreciated that the scheme has been designated as integrated urban development scheme in two senses. Firstly, the project is expected to take a total view of the activities taking place in the town with reference to its economic role such as housing, traffic and transportation, water supply, sanitation, industrial and commercial activities, primary health care, recreational facilities, etc. It seeks to provide a city-wide focus for the local agencies which have so far operated only for providing civic services. It seeks also to provide a district-wide focus for the town by relating its activities to what is taking place in the rural hinterland, and specifically to improve its usefulness for such requirements of the rural population as supply of inputs, credit, marketing and processing facilities, consumption requirements, etc. In this context, it will be useful to identify schemes in meetings of the district development councils such as the one existing in Maharashtra whereby benefits from investments on this programme could be optimised for rural and urban development. It would also serve to mitigate the anti-urban bias often prevalent among representatives from rural areas since they would perceive urban development as complementary and supportive to rural development.
- (iii) It is further found that the schemes were generally for-

mulated without fully involving the community, meant either in terms of elected members of local councils or in terms of the public at large. In the case of the schemes of low cost sanitation and water supply as well as schemes for the benefit to public, involvement of the community would result in solutions which can be implemented without much resistance and lead to reduction in cost on account of community inputs. This is an approach that is being tried out in UNICEF project for the development of small and medium towns in selected 9 districts.

As mentioned earlier, a Plan provision of Rs. 96 crores has been made for this scheme in the central sector, but the release of funds is only about Rs. 15 crores including Rs. 2.25 crores released during 1979-80. This reflects the fact that the project reports have not been received for the sanction of all the 231 towns and also the slow progress of schemes already approved. The difficulties have been broadly identified as follows:

- (a) Organisational problems in the formulation and speedy implementation of the projects under this scheme, arising partly from overlapping responsibility for town planning and urban development and municipal administration at the state and local levels;
- (b) Shortcomings in the preparation of project reports according to the guidelines prescribed for this scheme;
- (c) Failure to identify the agencies at the state and local levels for the preparation of detailed estimates and for the actual execution, monitoring and coordination;
- (d) Failure to provide adequate budget provision in the state and local budget for central assistance, matching provision, and for expenditure incidental to the project;
- (e) Delay in land acquisition and the sanction of estimates and tenders, shortage of materials, cost escalation, change of project site due to local problems and other field level difficulties.

These problems are being individually taken up with state

governments by the ministry of works and housing as well as the TCPO in order to speed up the progress of the project. They are also being pursued in the meetings of monitoring committee convened by the state governments. The problems at field level are being discussed in detail in workshops, seminars and courses arranged by the regional centres situated at Bombay, Lucknow, Hyderabad, Calcutta and Delhi. The ministry of works and housing is also undertaking an evaluation of the old IUDP programme operated during Fifth Five Year Plan in order to draw lessons for the present scheme for the development of small and medium towns.

FOLLOW-UP ACTION

Some follow-up action has been initiated on the implementation front on the basis of feedback received from the state governments. Since the costs of schemes are found to have increased after the approval of original scheme, some norms are being evolved in order to decide the basis on which the cost escalation of individual scheme is to be permitted. Discretion is being allowed to the local authorities for changing the location of schemes in consultation with the TCPO so long as the overall physical achievement and the objectives of the schemes are not likely to be altered. Discretion is also being given for re-appropriation of funds for single scheme of different project as also varying rates of progress so long as the total composition of the project and physical target are not altered. Since the funds released to the implementing agencies are locked up with the land acquisition officer on account of the procedural requirement of depositing compensation in advance, the state governments are being requested to consider permitting the local authorities to deposit the amount at the stage of declaring the award by providing necessary guarantee on behalf of the local authority. The state governments are also being requested to give priority to land acquisition proceedings for this project. It has been realised that the objectives of the scheme will depend upon improvement in financial and implementing capability of local bodies in the course of execution of schemes on a self sustaining basis. The state governments are, therefore,

required to introduce measures for improving the finances of the local bodies both in order to provide for maintenance cost of completed schemes and also to generate sufficient surplus for different schemes of the towns. They have also been advised to get the municipal personnel trained in the regional centres supported by the Government of India. Separately, the state governments have also been asked to undertake a comprehensive examination of the state of municipal finances and provide for suitable devolution of resources after taking steps to utilise the existing resource base to the fullest extent. The subject is also being discussed in detail in various study groups appointed by the ministry.

It is hoped that as a result of various internal exercises undertaken by the ministry of works and housing and the town and country planning organisation in consultation with the state governments for speeding up the progress of the schemes, the progress will be considerably accelerated in the remaining years of the Sixth Plan. □

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: PROBLEMS AND ISSUES IN PERSPECTIVE

C.S. CHANDRASEKHARA

The serious concern that has been felt in regard to the unprecedented growth of metropolitan and large cities, the heavy migration of rural population to urban centres in search of job opportunities, the inadequacy of economic and social infrastructure in the rural areas to support and sustain balanced development, have all led to the universally accepted conclusion that the integrated development of small and medium towns should be undertaken expeditiously. These towns once developed will offer job opportunities to the surplus rural population, provide economic and social services to the rural population in their hinterlands, stimulate agro-industrial growth as well as development of consumer industries, thus making it possible to increase the per capita income in the towns as well as in the surrounding areas. The small and medium towns will provide a network of functionally and formally organised human settlements which will provide the basic infrastructural support to both rural and urban areas in each district or region. Thus, while there is no conflict of opinion in regard to the urgent need for developing these small and medium towns, it is in regard to the implementation of this programme that a number of issues have arisen which need to be sorted out if the objectives set out above are to be achieved to the maximum extent.

ISSUES IN PROGRAMME INTEGRATION

The first issue that arises is whether all small and medium

size towns are to be covered under the programme or whether it is to be a selective process and if so how and what would be the basis of such selection. According to 1981 Census reports, there are 3029 towns of less than 1 lakh population and these are distributed in different size groups of towns : class II—270; class III—739, class IV—1048; class V—743; and class VI—230. It is obvious that all the towns need not be covered as some of them may be dysfunctional so far as its hinterland is concerned. On the other hand, if a process of selection is resorted to, experience in the past indicates that the selection is generally not on the basis of potentiality of the town to be developed as a part of the overall network but on other social and political considerations. Normally, district headquarter towns are selected or towns suggested by the state governments would be on the basis of political and other non-functional factors. Thus in the process of selection, towns which are most suitable may get left out and the towns which are not at all suitable included, which will not achieve the process of integration aimed at. It would, therefore, be prudent to extend the programme to cover all the small and medium towns except those which have no role to play in the development of hinterland.

The question will be raised as to whether the financial provision in the Sixth Plan can cover all the towns. The experience of the two previous plans has revealed that the plan provisions have not been able to be spent even to the extent of 50 per cent and as the programme of this type is to continue in the future plans as well, it is desirable that all the towns are covered and whatever possible is achieved in the Sixth Plan, the remaining to be covered in the Seventh and subsequent plans. This policy will avoid the process of selection which has been found to be self-defeating in the past.

The development of small and medium towns is to be viewed in an integrated manner. How exactly is this integration to be achieved and in what terms? In actual practice, what the scheme intends to, is to provide the small towns a financial assistance matched with state's support for improving its infrastructural base such as water supply, drainage, social services, etc., and to promote industrial development through a set of incentives. The process of integration in its one

dimension has to be seen naturally in the context of the various schemes taken up in the town within an overall developmental frame for the small town. This type of integration can be assumed to take place.

What perhaps is more crucial is the integration of the growth of each town with respect to its hinterland where it may have a number of villages, large and small with different patterns of economic activity. The development of the small town has to be conceived in terms of the services both economic and social, which the town can render to the surrounding area and the population living therein. Thus it will not be adequate, if a development plan only for the town is conceived; it is necessary to draw up a plan for the development of the town in relation to the projected development of its entire hinterland. The integration would therefore imply that a total infrastructural base, both economic and social for the town and its hinterland, is conceived in its entirety to undertake development. It will neither be adequate, if only the infrastructure facilities for the population of the town are made the target of the programme not in fact, it may be necessary at all for all the infrastructural facilities, especially those that are to serve the hinterland to be located in the town. Rather they have to be located with reference to the role which the town will play in providing the services.

Another dimension of this integration is the linkage of the small town with the higher order towns and cities in the region. These linkages both forward and backward will help in the building up of economic development activities to higher levels. The form in which this integration has to be conceived will be in terms of flows of people, commodities and services within a multi-directional spatial frame. Unless the concept of integration is applied in the three dimensions suggested above, the programme of integrated development of small towns may end up simply as a programme of provision of drinking water, sanitary facilities and house sites for weaker sections of the society in small towns thereby defeating the core objectives of the programme.

It should be made clear that the integrated development of small and medium towns is not a one-time development affair. It should not be seen as providing financial assistance

during the Sixth Plan and leaving the town to fend for itself once the assistance has been given. The programme has to be seen as a continuous one followed up in subsequent plan periods until the small and medium towns get established on a permanently growing basis with an inbuilt capability to expand and extend its service functions commensurate with the growing activities in the hinterland. Thus it is not the master plan or the development plan for the town that is to be seen as the target but a growth model for the town and its hinterland within a time span of 10-15 years' perspective, which should guide the development programme of these towns. Simultaneously, the investment components as well as the resource building components have to be seen in their long-term role of building up innate capabilities as well as effective mobilisation of resources.

ISSUES IN MANAGEMENT CAPABILITIES AT THE LOCAL LEVEL

Contrary to the general impression, the key issue in regard to the programme of development of small towns is not the availability of financial resources, but that of providing and developing management capabilities which should be able:

- (a) to plan and develop basic economic and social infrastructure within the town and its linkage with the hinterland in an appropriate manner;
- (b) to promote and support development of employment-oriented activities with special attention to the building up of entrepreneurship both in the town and in the hinterland as well; and
- (c) to manage efficiently and equitably the development process, providing guidance in regard to an orderly development and regulating it in a positive manner.

It is obvious that the small towns, constituted as they are today, do not have any kind of recognisable organisation to handle the above tasks. If for the purpose of the scheme, an external organisation is imposed even temporarily, while it

may fetch some immediate results, as soon as that temporary organisation is withdrawn, the town is likely to sink back to its original stage. Therefore, the programme should provide for, even to begin with, the building up of capabilities at the local level to handle the above functions in terms of: (i) managerial set-up, and (ii) technical know-how.

The managerial capabilities have to be built into the small town organisation. As most small towns have a municipal council, it may be necessary to strengthen the executive wing of the municipal council by defining in that process, the unambiguous relationship between the deliberative wing and the executive wing of the municipal organisation. As the deliberative wing at the small town level is generally uninformed and unaware of the larger issues of the integrated development of the towns as well as its hinterland, the responsibility falls on the executive wing to inform, to convince and to carry the deliberative wing along with it in implementing the development programme. In this context, a too elaborate executive wing will be neither feasible nor financially supportable at that level. One could conceive the city manager type of an executive wing to be set up in the small towns with supporting technical staff. No doubt the city manager will take full advantage of the capabilities and resources available with central and state specialised organisations in implementing the programme. However, the responsibility of coordinating and monitoring the entire programme to achieve the basic objects will lie solely with the city manager.

If the programme of integrated development of small towns has to succeed, it is important that the installation of a capable executive organisation is taken up with urgency and with all seriousness. The city manager type of set-up is simple, direct and within the capabilities of the small towns' resources. However, the city manager will have to be trained specially to handle this task and a supportive training programme on a sufficiently large scale has to be structured. The city manager need not be a generalist; he can be an economist, a lawyer or a technical man such as an engineer or a planner. The technical background will be an additional asset which will enable him to take quick decisions in regard to the development programmes and also to search for and choose

feasible alternatives. The city manager should be made fully responsible and should also be able to mobilise support of the deliberative wing of the municipal organisation in full measure.

ISSUES IN PROGRAMME OPERATION

As regards the operational part of the programme of development of small towns, it is obvious that the traditional planning process of preparing a long-term development or master plan, after carrying out elaborate surveys and studies, and translating the plan into detailed action programme for execution will not work and will defeat the very purpose of the programme which is to anticipate development and provide for it. It takes too long, is too much involved and is likely to lag continually behind the development tempo. It is necessary to adopt a modified methodology, which may quickly provide guidelines for the development of infrastructural base as well as laydown directions along with which growth could take place. It should allow growth to be promoted in an orderly manner as and when it takes place, without being slowed down or hindered. Such a methodology should be evolved in detail and the executive wing of the small town should be fully trained in regard to the promotional and regulative aspects of this approach. At every stage of development of small and medium towns, it is necessary to have a positive attitude built into the programmes, and into the executive organisations dealing with the programmes, and the financial strategy and structure of the programme. It is this positive approach and the attitude that would ultimately determine the success of the programme of integrated development of small and medium towns.

A second operational aspect is that of provision of financial support by the centre and states. Experience from the integrated urban development programme has clearly indicated that the present financial procedures for appraisal, determination of quantum of financial assistance and its release after assurance from state or local bodies for the matching contribution has resulted in tedious delays, hold ups at the state level, and spending of the released funds only on the

last day of that financial year thus making the entire financial administration a mockery. From the state's attitude, it is obvious that the matching financial assistance has to come mainly from the local body itself from its own resources or the resources it can mobilise from its hinterland. Hence, greater reliance has to be placed on the efforts to be made by the town executive and the initiative to mobilise resources has to be built in at that level. In order to do so, the central assistance must be made available not directly and annually in bits and pieces as is being done at present but making available the required amount of credit to the town management through scheduled banks located in the towns.

The scheduled banks would also undertake the appraisal of the individual schemes of an integrated programme within the broad framework formulated to achieve the objectives set forth earlier. Necessary technical assistance can be provided to the scheduled banks by central and state departments having the expertise, leaving it to scheduled banks to make use of such assistance as and when required. Credit availability and quick processing of financial assistance at the local level will add a new dimension to the effective implementation of the programme. □

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: SOME CONCEPTUAL ISSUES

GANGADHAR JHA

The Indian urban scene has been dominated by the growth of metropolitan and large cities. This has instilled concern in managing and servicing the larger urban conurbations because of 'prohibitive' "social and economic costs of servicing large concentrations of population."¹ The existing scant evidence on the relative merits of metropolitan centred urbanisation or decentralised urban growth has led to a persistent debate on these two viewpoints.² Decentralised urbanisation and balanced urban growth in India has been advocated on various forums and in various official documents from time to time³ by restricting the growth of metropolitan centres and developing the small and medium size towns. This culminated in adoption of a major policy decision by the Government of India in December, 1979 when a programme for integrated development of small and medium towns was

¹Government of India, Planning Commission, *Fourth Five Year Plan, 1969-74*, p. 399.

²Alan Gilbert, "The Arguments for Very Large Cities Reconsidered", *Urban Studies*, Vol. 13, No.1, February, 1976, pp. 27-37; for a perceptible analysis of urbanisation and city size in the Indian situation, see Rakesh Mohan, "Urban Policies and Growth Trends: An Analysis", *Urban India*, Vol. I, No. 1, September, 1981, pp. 9-16 and 22.

³Government of India, Ministry of Works and Housing, *Report of the Task Force on Planning and Development of Small and Medium Towns and Cities*, Vol. I, 1977, pp. 89-90; Government of India, Planning Commission, *Third Five Year Plan*, p. 689, *Fourth Five Year Plan 1969-74*, p. 398, *Draft Fifth Five Year Plan 1974-79*, Vol. I, p. 2, and *Draft Sixth Five Year Plan 1978-83 (Revised)*, 1979, p. 457.

chalked out as a sponsored scheme of the central government under the Sixth Five Year Plan with 50 per cent financial assistance on the matching basis.⁴

The programme envisages integrated development of about 231 small and medium towns having a population of less than 100 thousand in 1971. An outlay of Rs. 960 millions has been allocated in the Sixth Five Year Plan. Several state governments have responded to the 'guidelines' given by the central government by preparing the schemes for the integrated development of such towns and till now 156 projects involving an investment of Rs. 1137.6 millions have been sanctioned by the central government⁵. The integrated development of small and medium towns (IDSMT) thus seemingly is an important policy decision expected to have significant ramifications. However, effectuation of its goals and objectives is dependent upon the nature of programme content and also the fiscal and managerial response given to the programme by the state and local governments of the selected towns. It is also dependent upon conceptual clarity of the programme itself as the detailed project reports or the plan of action for the IDSMT are to be prepared according to the 'guidelines' formulated for this programme.

The paper, therefore, first analyses and evaluates the programme for IDSMT at the conceptual plane for understanding its intent and conceptual overtures as an 'integrated programme'. This is done by examining the concept of integrated development as developed, understood and practised elsewhere and also in the context of rural development in our own country. Subsequently, the paper raises certain critical issues at the practical plane which are relevant for effectuation of the programme objectives.

Coming to the conceptual content of 'integration', it would be worthwhile to go into the semantics of the word 'integ-

⁴Government of India, Ministry of Works and Housing, *Integrated Development of Small and Medium Towns—Guidelines*, December, 1979.

⁵Government of India, Ministry of Works and Housing, *Agenda Paper for the 19th Meeting of the Central Council of Local Government and Urban Development and 8th Joint Meeting of the Central Council of Local Government and Urban Development and the Executive Committee of All India Council of Mayors*, February, 1982, New Delhi, pp. 23-24.

rate'. The standard dictionary meaning of this word used to be "to complete (what is imperfect) by the addition of the necessary parts" and also "to combine (parts or elements) into whole" which became obsolete by the years 1604 and 1802, respectively.⁶ The conceptual stance of integrated planning and development as it has been developed and is understood, is very close to the dictionary meaning of the word 'integrate' and, therefore, it seems that the obsolete meaning has come to be revived. Thus when applied to planning and development, it suggests to provide crucial missing links.

As an approach to planning and development, the tenets of 'integrated planning' started crystallising in the mid-sixties when it was increasingly realised that sectoral planning could not provide an effective solution to the complexities of economic and social systems and the new awareness and concern for the environment. These being interrelated, the development strategy has to strive for total development of the society by taking a wider sweep for satisfying all the related needs and requirements of the people. Integrated development, therefore, requires merging of the objectives of different functional agencies into a concerted action for improving the economic status, social wellbeing and environmental milieu. To quote from deliberations of a UN seminar on "Integrated Physical, Socio-Economic and Environmental Planning":

Policies designed to tackle one issue also affected the scope for action on other interrelated issues. Thus planning was no longer seen primarily as a single focus activity. Planning had gradually become refocused by acknowledging explicitly the interplay of social, economic and environmental forces at work in society. There has been a tendency for each level or sector of planning to develop its own area of expertise and corporate identity, with all the consequent implications for problems which fall between disciplines or jurisdictional boundaries. Many problems

⁶*The Shorter Oxford English Dictionary on Historical Principles*, Vol. I, Clarendon Press, Oxford, 1973.

could not be dealt with without an integrated approach.⁷

Integrated planning thus evolved in response to inadequacies of the sectoral plan especially in terms of lack of inter-relationship between various sectors. Growth of various sectors in disharmony with each other does not lead to the satisfaction of all the related needs of the society and is also not able to improve the quality of life of the people. Integrated planning is, therefore, required to develop "forms, methods and procedures or organisations which allow the necessary interaction of all critical factors at appropriate time".⁸ Physical, economic, social and environmental objectives and also the strategies for effectuation of those objectives require to be integrated into an overall planning strategy. This is but only one form of integration—horizontal integration of various sectoral interests. Yet another type of integration is the vertical integration of the different levels of plans—national, regional and local in a single sector and in more than one sector.

Integrated planning thus envisages concurrent action on a wide range of activities for harmonious and balanced development of the society. This being the import of integrated planning, one could very well argue that 'planned development' in itself means harmonious and integrated development of sectoral interests and why then this new cliché for the same? Planned development does imply a balanced development of all sectors. But because of its preoccupation with accelerating the pace of economic development and growth in the GNP, components of social development and environmental improvement needed for the satisfaction of all the needs and an improvement in the quality of life of the citizens, some-

⁷United Nations, Economic Commission for Europe, Committee on Housing, Building and Planning, *Report of the Seminar, Seminar on Integrated Physical, Socio-Economic and Environmental Planning*, June 18-22, 1979, Bergen, Norway.

⁸P.F. Everall, *et al*, "Introductory Paper on the Theme of Integrated Physical, Socio-Economic and Environmental Planning", Paper presented at the *Seminar on Integrated Physical, Socio-Economic and Environmental Planning*, organised by the Committee on Housing, Building and Planning, Economic Commission for Europe, United Nations, Bergen, Norway, 1979.

how get diffused in the framework of economic planning. There is an explicit recognition of this in the Sixth Five Year Plan. To quote the Plan document, "...a sectoral approach is not adequate for an overall development of an area nor for the percolation of the benefits equitably among the local population..."⁹ Satisfaction of needs requires the provision of packages of services by integrating the interrelated sectoral components at the area level. It is also imperative to balance various sectoral interests and group objectives by encouraging participatory approach to development for taking care of the needs of the deprived and weaker sections. Viewed in this context, 'integrated planning' as an approach for development—economic, social and environmental—is all the more relevant for the planning of human settlements whether rural or urban. It is perhaps because of these reasons that Integrated Urban Development Programme was earlier initiated in the Fifth Five Year Plan and the Integrated Rural Development and the Integrated Development of Small and Medium Towns in the Fifth and the Sixth Five Year Plans, respectively.

In the wake of exodus of rural population to the urban centres, especially the larger ones, the problems of slums, squatter settlements, insanitation, non-existence of services like water, health, education, electricity are on an increase. These and other related social welfare services need to be provided along with shelter and employment opportunities. Satisfaction of all these related needs of all the members of the urban and for that matter even rural communities, may not be the prerogative of a single organisation. It has to be done by roping-in all the functional and development agencies operating at the settlement level. These agencies, at the moment, are operating in their functional domains according to the objectives set out for them by their respective departments mostly on the basis of *disjointed incrementalism*. These have, therefore, to be integrated into a concerted plan of urban development so that the urban community is able to have avenues of fulfilling its needs and requirements without

⁹Government of India, Planning Commission, *Draft Sixth Five Year Plan 1978-83*, (Revised), 1979, p. 303.

any deprivation from enjoying the fruits of development. Such an approach has already been adopted by the local government authorities in Finland, Norway and the Netherlands.¹⁰

IDSMT: AN EVALUATION

Strategy of Integration

The 'guidelines' formulated for the integrated development of small and medium towns (IDSMT) talking many things at the same time does not quite make its strategy clear. Although there is ample clarity in its intention of reducing the rate of migration to metropolitan centres, the means of achieving this, however, is not so. It talks of integrated area development of small and medium towns and their hinterland so that they "would perform the role of services and market centres to the rural hinterland in the context of the balanced development of the whole district and the region."¹¹ Besides, the strategy also envisages integrated development of small and medium towns by linking "employment generation with urban development and the capacities of the institutions responsible for urban development". For this, it mentions development components both in the central and state sectors to be integrated at the town level. It, therefore, seems that the intent of the programme for IDSMT is to: (i) promote integrated development of the small and medium towns and their hinterland for a balanced development of rural and urban areas, and also (ii) integrate provision of services for the satisfaction of interrelated needs of people at the town level. These two policy prescriptions contained in the 'guidelines' call for two different types of strategies.

Integrated area development (IAD), conceptually, means integration of all the economic and social activities (functional integration) and integration of activities over space (spatial integration).¹² Spatial integration of activities is cru-

¹⁰P.F. Everall, *op. cit.*

¹¹Government of India, Ministry of Works and Housing, *Centrally Sponsored Scheme for Integrated Development of Small and Medium Towns—Guidelines*, December, 1980.

¹²Lalit K. Sen, "Role of Area Development in Multi-Level Planning", *The Indian Journal of Public Administration*, Vol. XIX, No. 3 (July-September), 1973, pp. 278-288.

cial for balanced area development as the location theorists have already had it that the spread effect of growth depends upon how appropriate is the location of an activity. Appropriate activity has to be located at appropriate places in the hierarchy of settlements depending upon the nature of activity and the degree of its specialisation. It is, therefore, imperative in such a scheme of things to identify various levels of settlements starting down below from the central villages to the growth centres and regional cities to devise the location of various economic and social activities most appropriate for the particular level of settlement and weave them together through a wider network of inter-linkages over the whole areal unit, may it be a wider region or the hinterland of small and medium towns.¹³

As for the second intent of the 'guidelines', the integrated provision of services requires to identify all the necessary economic and social components for enhancing the quality of life and social justice and to link them in a concerted programme of action in the form of a corporate plan for the town. It would, therefore, be useful to see whether these are reflected in the 'guidelines' and the actual action plan or not.

How Integrated is the Programme for IDSMT?

The programme for IDSMT has been perceived under the policy frame of the Sixth Plan which lays down a good deal of emphasis on promoting "a balanced spatial pattern functionally consisting of villages, towns, cities and metropolises somewhat different functionally but woven into an integral pattern of complementarity rather than subservience"¹⁴. Therefore, the plan envisages development of small and medium towns to "slow down and, if possible, reverse the rate of growth of metropolitan cities". Though the plan talks of a broader policy of developing a hierarchy of settlements, when it comes to the adoption of means to effectuate this objective, the strategy is limited to the integrated provision of infrastructural facilities at the town level. The 'guidelines' therefore, also reflect the same policy stance. There is no

¹³Lalit K. Sen, "Role of Area Development in Multi-Level Planning", *op. cit.*, pp. 278-288.

¹⁴Government of India, Planning Commission, *Draft Sixth Five Year Plan 1978-83*. (Revised), 1979, p. 457.

mention of the role of small and medium towns in the hierarchy of settlement pattern and how it is to be articulated for acting as counter magnets to the metropolitan centres to promote a balanced development of the towns and its entire hinterlands. How the mere provision of infrastructural facilities can enable small and medium towns in achieving the desired settlement pattern is, therefore, open to doubt. 'Integrated area development' is thus neither reflected in the 'guidelines' nor in the myriad IDSMT project reports so far prepared and now in operation after their approval by the central government. Even the Sixth Plan's intention of providing inputs for agriculture, like, workshops, ITIs, vocational institutions, depots, etc., in the small and medium towns for fully exploiting the potentialities of agriculture does not find any place in the project reports.

The second type of integration intended to be achieved by the provision of all inter-related economic and social overheads for the satisfaction of the related needs to improve the quality of life at the settlement level also does not seem to be anywhere near the concept of integrated development. The Sixth Plan has proposed increased investment for housing, water supply, communication, education, medical care and recreational needs.¹⁵ Accordingly, these components are proposed to be integrated by the 'guidelines'. Land acquisition, traffic and transportation, development of mandies, markets, industrial estates, processing and servicing facilities are proposed to be provided under the central sector and slum improvement and their upgradation, urban renewal, small scale employment generation, lowcost water supply, sewerage, drainage, sanitation, preventive medical facilities, health care, and parks and playgrounds are to be provided in the state sector to be financed by the state governments. Although an attempt has been made to provide interrelated components for the integrated development of towns, some important components are still missing from the range of activities and facilities to be integrated. Education, medical relief, communication, family welfare, services for the welfare of children and the handicapped are such few examples.

¹⁵Government of India, Planning Commission, *op. cit.*, p. 458.

An integrated development of human settlement essentially requires to pool of together various development and functional agencies of the states' field administration operating in the district and at the settlement level along with their schematic budgets for the integrated provision of services and development of the settlements. Even many components of economic and social overheads conceived in the 'guidelines' do not find any place in the project reports presently in operation in various states.

The project reports with a few exceptions have, by and large, included only a few components both under the central and state sectors. In many cases, though there is a ritualistic mention of the role presently being performed by the towns in their respective hinterlands, the plan of action does not seem to be guided by the dominant role being played by the towns nor does it propose any concrete step to enhance their capabilities of role performance. Project report of a town,¹⁶ for example, mentions its dominant role as the 'collection and distribution centre'. Programme contents for the same town are: construction of a fish market, service roads, parking lots, residential development, rehabilitation of certain commercial areas in the central sector and besides commercial, residential and industrial developments, development of bus stand, *taxi stand*, *swimming pool* and parks in the state sector. Programme content of another town includes residential development, construction of roads, weekly markets and shops and municipal dispensary. There are many such examples. The components of development as included amply speak of the extent of integration in development proposals for the towns. In many instances, development schemes contain the programmes as envisaged by the Master Plans prepared earlier for the towns. Hence the spirit of the Master Plan has sneaked into the integrated strategy for the development of small and medium towns.

Integrated Development in the Rural Context

To digress for the time being, the integrated approach has been better conceived in the realm of rural development. The

¹⁶The names of towns are deliberately not mentioned here.

strategy of integrated rural development aims at total development of rural areas by linking special programmes and activities in a single strategy for developing various facets of the rural community. It is a package of programme embracing all aspects of rural problems in the spheres of agriculture, rural industrialisation and the provision of infrastructure and services, like, health, nutrition, education, literacy and other basic amenities. Appropriate and relevant programmes best suited for the development of rural areas and infrastructure and services for enhancing the quality of life of the rural populace have been integrated together for all round development of rural areas through "systematic, scientific and integrated use of all our natural resources . . . (for) enabling every person to engage himself in a productive and socially useful occupation and earn an income that would meet at least the basic needs."¹⁷ The integrated approach is put forth in unequivocal terms in the Sixth Plan:

. . . the Integrated Rural Development now contemplated involves a multi-pronged attack on the problems of rural development. 'Integration' here covers four principal dimensions; integration of sectoral programmes, spatial integration, integration of social and economic processes and above all the policies with a view to achieving a better fit between growth, removal of poverty and employment generation.¹⁸

But the plan approach to urban development has been marked by incongruities and inconsistencies. Earlier during the Fifth Plan, the Integrated Urban Development Programme (IUDP) was confined to very large cities and even the metropolitan cities during 1974-79 and a sum of Rs. 113 crores was spent on the integrated development of 31 cities

¹⁷C. Subramaniam, "Strategy for Integrated Rural Development", *Community Development and Panchayati Raj Digest*, Vol. 8, October, 1976, pp. 55-67.

¹⁸Government of India, Planning Commission, *Draft Sixth Five Year Plan 1978-83* (Revised), 1979, p. 305. The conceptual perfection notwithstanding, execution of IRD programme has, however, been limited to raising of income of the poorest among the rural poor.

without having any dent on achievements of the stipulated objectives. The revised guidelines for the Fifth Plan's IUDP explicitly acknowledged the distortions of the IUDP in these words: "Though the original guidelines issued for the scheme contemplated central support for different kinds of projects, including urban infrastructure, in actual practice central assistance for the majority of the cities and towns covered, has gone only for land acquisition. . ."¹⁹ Concern for the integrated development of metropolitan cities afterwards shifted to the development of small and medium towns. This sudden realisation acquired radical stance of even restricting the growth of metropolitan cities. This in itself speaks of the lack of clarity of the national urbanisation policy and not-so-serious intentions for the urban development policy.

The new programme for the IDSMT seems to have been impelled by "the decline of small and medium towns in terms of population",²⁰ because of the lack of new employment opportunities. This diagnosis, however, has now proved to be erroneous. Traditional analysis of small towns' growth on the basis of size classes, though has long been subjected to doubts as an appropriate method of analysis, has now lost its relevance.²¹ A study based on the growth of individual cities has revealed that the small and medium towns have not decayed; in fact their growth rate has been close to that of the large cities.²² This, however, does not mean that the programme for IDSMT is irrelevant. Rather it needs to be emphasised that the impressive rate of growth of small and medium towns speaks of the economic base that these towns have come to acquire spontaneously. This economic base has been sustaining the increase in their population. If it is

¹⁹Government of India, Ministry of Works and Housing, *Revised Guidelines for the Central Scheme for Integrated Development in Metropolitan Cities and Area of National Importance*.

²⁰*Sixth Five Year Plan, op. cit.*, p. 457.

²¹Rakesh Mohan, *op. cit.*

²²M.K. Jain, *Inter-State Variation in the Trends of Urbanisation in India 1951-71*, International Institute of Population Studies, Bombay, 1977, p. 31; see also S.S. Dutt, "India's Urban Future: Role of Small and Medium Towns", Paper presented at the 29th Annual Town and Country Planning Seminar, organised by the Institute of Town Planners, India, at Gandhi Nagar, January, 1981.

strengthened by planned intervention, these towns could well become instrumental in the development of their hinterlands. The IDSMT programme, therefore, needs to be made more effective by adding the missing vital links and by ridding it from the imprint of the Master Plan ideology. It needs to be stressed that 'integration' has inevitably to be conceived and built into the action plan right at the stage of its conceptualisation and formulation. An effective coordination at the stage of implementation cannot be a substitute for integration.

ISSUES FOR IMPLEMENTATION OF THE IDSMT

These conceptual issues apart, there are yet other issues relevant for successful implementation of the programme.

Finance is the fuel for keeping the programme on its right track and taking it to its ultimate destination. The 'guideline' for the programme is very clear about the funding arrangement. Accordingly, 50 per cent of the total project cost in the central sector is to be met by the central government subject to a ceiling of Rs. 40 lakhs in the form of loan. Central loan assistance being limited, major share of funds in the central sector and the entire funds in the state sector have to be mobilised by the state or the local implementing agency. Firstly, small proportion of central funds available for the programme does not seem to be adequate for fulfilling the larger objectives of integrated development of towns, their hinterlands and the integrated provision of services. Secondly, the range and nature of components to be integrated into the development programme being substantial, it requires massive effort on the part of state governments for mobilisation of resources especially in view of the demand for funds on state finances by other priority sectors. Thirdly, programmes in the state sector appended in the project reports are misleading as, except for the central sector funds, there does not exist any mechanism of financial control in the state sector for ensuring investments on the components in this sector. Thus, the amount of investment to be made in the state sector might not be made at all. Project reports of most of the towns have mentioned the state sector pro-

grammes only to get the paltry amount of central assistance. Some of the towns have already adopted an ingenuous method of getting the central funds by preparing proposals for development estimated to cost up to Rs. 80 lakhs only. Fourthly, even though free flow of state funds is assumed to be coming for implementation of the programme for IDSMT, ways and means have to be found for mobilisation of resources by the municipal authorities.

The problem of finance becomes all the more serious if the states' matching contribution is to come as a loan to the local bodies. It needs to be emphasised that the capital projects developed under the IDSMT programme shall ultimately have to be maintained by the civic authorities. About 12 to 15 per cent of the total capital cost generally goes towards the recurring expenditure to meet the maintenance costs. The civic authorities are already finding themselves in a straight financial jacket. A recent judgement by the Supreme Court of India²³ extending provisions of the Rent Control Legislations too far for the assessment of property tax—the premier source of municipal revenue—and the contemporary zeal exhibited by some of the state governments in abolition of yet another important source of revenue—the octroi—hardly leave any room for further mobilisation of local resources. Integrated development programme, therefore, cannot be conceived in isolation of devising ways and means of promoting fiscal capabilities and strength of the urban local bodies.

The integrated development programme involves a host of action agencies and, therefore, its successful implementation depends upon how effectively these agencies are made to act in a concerted manner. As mentioned earlier, integration and hence coordination has to be conceived right at the time of plan formulation. This requires to develop mechanics of effectuating the policy objectives in the form of a capital programme so that the multiple agencies involved in implementation of the action plan may orient their annual budgets in the light of programme objectives. Such a capital programme has to be evolved and located at the level from where the

²³Dewan Daulat Rai Kapoor Vs. New Delhi Municipal Committee, AIR 1980, SC 541.

funds flow to the various agencies and departments. Although there is a mention of such an innovative approach in the 'guide-lines', this could have been made a pre-condition for according central approval to the projects.

In sum, the integrated programme for the development of small and medium towns, presently, is subject to several conceptual imperfections and is lacking in conceptual clarity. In order to be an 'integrated plan' several missing vital links have to be provided in the programme content. Even for the successful implementation of the action plans prepared so far in various states and union territories, there are a number of issues looking for suitable solution. What is required, therefore, is an integration of objectives, sectoral programmes and also the policies; otherwise the programme for integrated development of small and medium towns would recede as mere cliché and dogma. □

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: ISSUES FOR IMPLEMENTATION

H.U. BIJLANI

This paper is written in the background of the growing realisation that integrated development of small and medium towns is important from the point of view of achieving balanced urban development as well as to provide requisite impulses of economic growth in these towns. Those small and medium towns which had access to investment have grown fairly well during the past three decades. However, in assigning any specific role to small and medium towns in general one often runs into difficulties of inadequate data and insufficient feedback.

CONCEPTUAL ISSUES

Number and Rate of Growth of Small and Medium Towns

Based on an analysis of census data, there are two distinct schools of thought: one which advocates that during this present century not only the growth rate of population of small and medium towns is slower but also their number has declined, particularly of the towns with population of less than 10,000. Similarly, the decadal growth rate of population during 1960s for towns with population of 50,000 and below was lower than the average growth rate of total urban population. Again during 1970s, the growth rate of these towns was lower than the national average except for towns with population of 5000 people and below¹.

¹Census of India 1981, *Series I, India, Paper 2 of 1981*, Registrar General of India, statement II, p. 36 and Statement XV, p. 38.

In contrast to the above, there is another school of thought which is quick to point out that it would be erroneous to argue that small towns have grown much slower than large cities and that the former have suffered and even declined as a result. They argue that the proportion of total urban population which lives in large cities is becoming large only as a result of population growth. According to this school, the belief about fast rate of growth of large cities is basically drawn from census data tabulations which are usually based not on individual cities but on size classes. Because of this the number of cities changes in each size class between the census years. Naturally in the highest size class with a population of 100,000 and above, none of the cities devolved out of it; while many graduated into it. Hence an impression is created that cities in the highest size class are growing very fast.²

Large Cities Vs Small Towns

The other issue which has been subjected to endless debate is regarding the city size. One group of professionals argue that no *prima facie* case exists for reducing the size of the large cities. It is also difficult for them to accept that the large cities have crossed that optimum size. This is because any cost comparison of large city with small town on cost basis is not a fool-proof method as standard of services may vary. In contrast, others argue that big cities are no longer engines of growth and are growing at the cost of small and medium towns.

These differences of opinion in my view largely emanate from the type of data that is available from census records and the way it is analysed. Take for example, the definition of as to what constitutes an urban area. Asok Mitra and others in their recent study³ state that in spite of the general tests laid down by the census commissioner of India on the eve of each decennial census, the actual classification and determination of urban areas always lay within the discretion

²Rakesh Mohan, *Existing Urban Policies and Growth Trends of Urbanisation*, July, 1981, (Mimeographed).

³Asok Mitra and others, *Population and Area of Cities, Towns and Urban Agglomeration 1872-1971*, ICSSR/JNU Study, 1980.

of the census superintendent or census director of any province or state. It is in exercise of this discretion that prevented the central definition from being rigorously applied throughout the country at any census count. It is doubtful whether census commissioner himself at any time desired his tests to be sorigorously applied.

Let me explain this point still further by taking the definition of an urban area from 1901 census onwards.⁴ The 1901 census defined towns which include every municipality of whatever size, all civil lines, every cantonment, every other continuous collection of houses permanently inhabited by not less than 5,000 persons which the provisional superintendent decided to treat as a town for census purposes. This discretion in defining towns remained the same from 1921 to 1931 census counts. The discretion used by the provisional superintendent in deciding as to what constitutes a town was quite significant. As a result of this discretion, 1040 towns were arbitrarily classified as such for census purposes in 1921. The number of such towns was 600 in 1931.⁵ In 1961 it was laid down that places with a somewhat larger population which do not possess definite urban character may be treated as separate towns. During this census, about 773 village settlements with a population of 10,000 or more were not classified as urban. In 1971, the number of such settlements rose to 1,358. Not that these village settlements were not growing fast enough, the decadal growth of population of these settlements was over 82 per cent.⁶ To draw any conclusion on the basis of above, it may not be fool-proof either to propagate or reject certain generalised propositions regarding growth or decline of small towns in terms of numbers and total population.

Optimum Size Issue Regarding Large Cities

Similarly, many conceptual problems exist while hypothesising that large cities have crossed the optimum size in terms of cost of servicing the population as compared to small and

⁴Asok Mishra and others, *op. cit.*, pp. xiii-xvii.

⁵*Ibid.*, p. xv.

⁶Government of India, Town and Country Planning Organisation, Towards Human Settlement Policy—2001, New Delhi, 1975, Table 4.

medium towns. Unless the standard of service is taken as constant, the comparative studies on cost basis may or may not give us correct policy options.

These difficulties of arriving at generally acceptable propositions in my view could have been considerably minimised if we could have solved some of the methodological and definitional issues of building up data and its analysis. Even if we had rigorously tested some of the available propositions, we could have developed in the Indian context a "generalised model of economic geography"⁷ and requisite methodology to throw up issues from purely operational angle. This at least could have provided a sound base for pursuing management cum growth strategies for large cities and growth cum improvement policies for small and medium human settlements of all sizes. Researchers who treat economic geography as synonymous with human geography would like this discipline to grow and help in formulation of an integrated human settlement development strategy. Historical generalisations in economic geography have up till now been shaped in qualitative form.⁸ In this context, P. George describes that "the growth of old towns in the same way as the creation of new cities (West European) is not due to increased urban activities but to their transformation as a result of confrontation with new forms of labour and groupings of population".⁹ The census definition in India takes one set of form of labour and grouping of population as towns and based on this analysis when we formulate policies and programmes we run into many conceptual issues.

Human settlement discipline is still building up to develop scientific laws. In many areas of spatial characteristics of human groupings of population in village, town, city or at regional level, we have only historical generalisations. Many unknown components which determine the occurrence of the phenomenon under investigation are often replaced in geographical research by spatio-temporal coordinates. Thus

⁷*Geographia Polonica*, Special Issue for the 21st International Geographical Congress, PWN—Polish Scientific Publishers, Warszawa, 1968, p. 251.

⁸*Ibid.*, p. 251-258.

⁹George P. La Ville, Paris, 1953.

spatio-temporal coordinates are used as substitutes in certain complex conditions whose casual influence cannot be fully recognised and defined.¹⁰ This at operational level creates its own problems.

Recent Developments in Quantitative Generalisation

It is only recently that relatively sound set of models which help give quantitative generalisations have been developed by the use of mathematico-statistical relationship. However, one major characteristics of these models remains that though they help us understand the situation in a given context, it is difficult to draw all-context valid propositions.

In contrast, a major characteristic of urbanisation process remains the unpredictability of its eventual outcome. Similarly, despite all the research effort the empirical analysis is too limited. These indicate that there is no rationale for assigning any arbitrary upper limit to city size. Similarly, studies on the determinants of migration process have brought out that people locate themselves at places where it is rational for them to do so.¹¹

These generalisations along with others are now enabling us to arrive at some consensus regarding processes which determine agricultural and urban land uses, industrial location, trade location, location of towns and the conglomerative impact of transport or canal networks. These developments in turn have thrown up some empirical results which have now helped us to identify growth centres.

What is needed today is to weave these disparate set of tentative or acceptable results into propositions which are consistent and hierarchically acceptable to explain linkage of rural areas with small towns or rural or small towns linkages with large cities or linkages of large cities with urbanisation in particular and economy in general.

In view of this, one ought to be very careful to attempt to

¹⁰Zbyskko Chojnicki, "Two Generalisation Models in Economic Geography, *Geographia Polonica*, Special Number of the 21st International Geographical Congress, pp. 251-58.

¹¹For fuller discussion of this and related issues see George Beir and others, "The Task . . . Countries", *World Development*, Vol. 4, No. 5, May 1976, pp. 363-409.

turn the trends of flow of income and employment and in spatial sense, the terms of trade of labour for income in favour of one or the other location. It is in this context that the programme for integrated development of small and medium towns in the regional as well as national context can be effectively implemented.

Problems Faced by Small and Medium Towns

There is no doubt that the problems which the small and medium towns have, are many. Instead of just ascribing them to faster growth of large cities, there is a case to remove some of the bottlenecks which have inhibited the development of small and medium towns. Mainly these have been as follows :

- (i) low priority within allocated resources for development of small and medium township;
- (ii) inadequate finance at local level to generate resources to help mobilise project cost financing from institutions;
- (iii) weak institutional structure to formulate, implement and monitor projects; and
- (iv) the lack of effective institutions.

The above constraints can continue to restrict the growth of small and medium towns whether large cities grow slower or faster. What we have to look at is that the living conditions in small and medium towns are improved. At present, the conditions in most of the small and medium towns are relatively not favourable. For example, out of 1027 towns still lacking drinking water supply facilities as many as 902 towns belong to the size class of 20,000. The position in regard to urban sewerage and sanitation in small towns is even worse. Out of over 3 thousand towns, only 198 have been provided with sewerage facilities¹³ and the small and medium towns have been the most neglected in this regard.

¹³Government of India, Planning Commission, *Sixth Five Year Plan*, 1980-85, pp. 394-401.

Development of Small and Medium Towns: A National Necessity

It is most timely that integrated development of small and medium towns has now been taken up at the national level and recognised as a national necessity. One may call it as part of reversal of population strategy or growth centre strategies or better rural-small/medium towns linkage needs or positive sum relationship between small and medium towns, on the one hand, and large cities, on the other, or on considerations of reducing regional disparities.

I would rather say that this realisation of the need for development of small and medium towns is the logical consequence of our earlier emphasis on reducing regional inequalities. We perceived the development of backward regions and relatively developed regions in a complementary manner. The Sixth Plan states "it should be generally accepted that the fulfilment of the objective requires upgrading the development process in the backward regions rather than curtailing the growth of those regions which have acquired a certain momentum".³

The logic of this argument in the regional planning context has to be taken in view while we discuss integrated development of small and medium towns. While small and medium towns need to be equipped with sinews of growth, the impulses of growth already acquired in the case of large cities need not be weakened, if average growth rate targets of total economy are to be achieved. In this context, we can follow a much more purposeful policy of proper management of large cities and commensurate as well as concomitant development of small and medium towns. In this sense ways and means have to be found to develop small towns as growth centres in their own right and help provide employment, income, civic facilities and thus develop what one may call, as 'counter-magnets'.

SIXTH FIVE YEAR PLAN STRATEGY OF IDSMT

Under the Sixth Five Year Plan, it is proposed to invest

¹³Government of India, Planning Commission, *op. cit.*, pp. 86-87.

Rs. 200 crores during the period 1980-85 to help achieve integrated development of 200 small and medium towns in the regional context.¹⁴ The guidelines of the government in this regard are quite elaborate and lay down that while formulating projects, relevant, information regarding location, population size, growth rate, income of the population, existing functions, etc., be collected and made use of and the role of each town to be covered in the programme be studied in relation to its role in the regional, state and national economic context. The scheme is though limited to towns with a population of 1 lakh and below, it should be such that it will check the migration of rural population to the large cities and would perform the role of service and market centres for the rural hinterland in the context of a balanced development of the whole district and the region.

The selection criterion of towns under this programme is not left to any specific size but within the overall population ceiling and it has to be carefully done with reference to the growth of population, the growth of the region, and the investment taking place in the hinterland. Another factor which has received due attention in this regard is the linkage of employment generation with urban development and the capacity of the institutions responsible for urban development.

As the programme is directed to achieve an integrated development of small and medium towns, the emphasis is on identifying resource support for components of different projects. The project report has to include components for which central assistance is available on a matching basis and also those components for which funds would be met from the provisions in the state plans. Both the types of components are indicated below :

- (a) *Components eligible for central assistance on matching basis*
 - (i) Land acquisition and development. Residential schemes will include sites and services with or without core housing;

¹⁴Government of India, Planning Commission, *op. cit.*

- (ii) Traffic and transportation to subserve the shelter and employment projects. This will include construction of roads and improvements, upgradation of existing roads but will not include purchase of motor vehicles; and
 - (iii) Development of mandis/markets, provision of industrial estates, provision of other service and processing facilities for the benefit of agricultural and rural development in the hinterland.
- (b) *Components for which funds are to be found from state plans, but which must form part of the integrated scheme*
- (iv) Slum improvement/upgradation; urban renewal and small-scale employment generation activity;
 - (v) Low cost schemes of water supply, sewerage, drainage and sanitation;
 - (vi) Preventive medical facilities/health care;
 - (vii) Parks and playgrounds; and
 - (viii) Assistance for the purpose of making modifications, wherever necessary, in city master plans to permit mixed land-use.

Standards

In order to have maximum advantage out of the given resource this centrally sponsored scheme puts adequate emphasis on standards and envisages lower standards for maximum coverage. The standards should also relate to the size of the urban settlement, nature of services to be provided and population trends, and should be capable of being incrementally built up as the resource position improves and paying capacity of the beneficiaries increases. The standards suggested are as follows:

- (i) *Water supply*: the existing norm of 40-60 gallons per head per day should be reduced to 15-20 gallons.
- (ii) *Health service*: extensive plans should give way to simple preventive medicine and environmental hygiene programmes.
- (iii) *Housing*: the bulk of money should go into site and

services projects for the predominantly lower income categories.

Planning Implementation and Coordination

The scheme lays down that the state governments will have to identify the agency/agencies to prepare and implement the programme. The organisational set-up of the local implementing agencies particularly their administrative and financial wings should be adequately strengthened and procedures streamlined for efficient implementation of the programme. In particular the emphasis in the scheme has been laid on giving adequate powers to the agencies to help them sanction estimates and to ensure prompt implementation by cutting down on procedural delays.

Training for Staff

The scheme also lays down adequate emphasis on training of staff and lays down that the state government should undertake to get the concerned planning and executing staff of the local bodies trained.

Financing Terms

The central assistance under this programme for components eligible for it is provided in the form of plan loan to the extent of 50 per cent of the cost of the projects in suitable instalments; matching assistance is made by the state government and/or implementing agency. The loan carries an interest rate of 5.5 per cent with a rebate of $\frac{1}{4}$ per cent for timely payment of principal and interest. The loan is repayable in 25 years with a moratorium of 5 years. The central assistance is to be passed on to implementing agency on the same terms as applicable to the central loan.

IDSMT Programme: Some Suggestions

The aforesaid programme to develop small and medium towns is laudable and the guidelines laid down in this regard to help formulation of projects are quite comprehensive. However, to help strengthen this programme at field level, the following suggestions are made for consideration of the Seminar:—

- (i) *Need to Develop Feedback:* As quite a good number of

projects have been formulated towards integrated development of small and medium towns, there is need to build up requisite information on the actual results achieved towards attainment of programme objectives. It is necessary to develop the requisite information so that adequate evaluation process is set in motion to continuously strengthen this programme.

(ii) *Need for Adequate Budgetary Allocations at State Level*: As over half of the resources have to be generated by the state governments in execution of this programme, it is necessary that adequate budgetary provisions are made. This is essential not only from the point of view of enabling the state governments to draw on central government loans but also on considerations of full achievement of targets under components which have to be fully financed by the state government.

(iii) *Need for An Integrated Model Approach* : As at present, there is conspicuous tendency to take up different project components and formulate projects accordingly. This leads, to piling up of projects within the overall scheme but may not lead to an integrated approach towards the problems that small and medium towns face. For example, there seems to be too much emphasis on housing, site and services, mandis and transport system but the integrated approach to the development of these towns has not received due emphasis as laid down in the guidelines issued by the Government of India.

In this context, it is suggested that a model plan should be prepared to illustrate as to how the integrated approach can succeed not only at project formulation stage but also during implementation, monitoring and evaluation of the programme.

(iv) *Identification of Indicators and Formulation of Evaluation Matrix*: Based on detailed evaluation of the existing projects, we could perhaps identify indicators which will help promote integrated development. It is also necessary to develop an 'evaluation matrix' with a view to quantify the contribution of each project towards attainment of goals laid down in this national programme. It is also necessary to

help ascribe value to each programme component of the project so that the project formulating States can assign due emphasis as per contribution of each component towards an integrated development of the town. In this way within the overall listing of project components, we would be in a position to rate the 'acceleration impact' or evaluate the linkage impact of each component towards integrated development.

(v) *Quantitative Analysis*: There is need to subject the evaluation data to an econometric analysis for quantitative measurement of this type of relationship. Propositions based on quantitative analysis of data are essential for operationalising a long-term programme for integrated development. This will even throw, as mentioned above, light on a generalised model of economic geography in the Indian context.

In this regard, there is also an urgent need to identify relationship which leads to tangible results in contrast to intangible impact. If benefit of this programme instead of being drowned in the backlog of problems, becomes visible, it will not only be possible to have an active people's participation but also motivate state agencies in pursuing the programme more vigorously.

(vi) *Economic Development and Urban Growth*: It is necessary that the central Town and Country Planning Organisation and state counterpart agencies, develop data banks based on an analysis of state's economy by sector of activity as well as by regional location, state demographic pattern, rural-urban linkages and when the project is formulated by the agency, then state is to be considered as a whole and on regional basis in order to determine towns which can be identified as ones with maximum potential and programmes for their development be prepared accordingly.

(vii) *Need for Project Formulation Workshops*: Lastly, it is suggested that workshops should be organised to help project managers prepare projects which later on can be submitted for approval. It is in this way that all the project evaluation results available can become inputs in the projects to be prepared henceforth.

The consideration of above suggestions might help strengthen not only the programme but may also link up integrated development of small and medium towns with large cities.

with the region and in a way the total economy of the state. All this will help ensure the success of this programme so vigorously launched by the government and for which the stakes are high and gains many. □

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: CRITICAL AREAS AND ISSUES

J.P. DUBE

After three decades of efforts for planned urban development and the changing socio-economic pattern, we are at the threshold of implementing a concrete programme known as integrated development of small and medium towns (IDSMT) introduced recently under a centrally sponsored scheme which is bound to influence the future urban development pattern in the country. The experience in the past reveals that the urban development programmes have indirectly contributed to the concentration of investments and development in big cities resulting in an imbalanced pattern of urban growth. It is in this context that we have to consider critical areas and basic issues as emerging from the implementation of the IDSMT programme. Since the scheme was introduced only two years back, it is too early to make an assessment of the physical achievements in effecting substantial changes in the contemporary pattern of urban growth. We may have to wait, perhaps for a decade or so, to expect substantial impact and changes. Therefore, this paper examines the issues and the critical areas arising out of the conceptual framework of the programme launched.

The IDSMT programme was introduced during 1979-80 and has been continued during the Sixth Five Year Plan (1980-85). The thrust of the urbanisation policy during the Sixth Five Year Plan is to give greater emphasis to the provision of adequate infrastructural and other facilities in the small and medium towns with a view to strengthen and equip

them to serve as growth and service centres for the rural hinterland and also to restrict the rate of migration to the larger cities. The programme covers towns having population of one lakh and below, according to 1971 census. The funding pattern of the project envisages that the central loan assistance will be given up to Rs. 40 lakhs or 50 per cent of the cost whichever is less, while the balance amount of the project cost would be met from the resources of the state governments and the implementing agencies. The components eligible for central assistance include land acquisition and development, traffic and transportation, development of markets and mandies, industrial estates and other facilities for the benefit of agriculture and rural development. In addition, the state governments are required to include in the project, schemes relating to water supply and sanitation, slum improvement, urban renewal, medical facilities, parks and playgrounds, etc., which will be met entirely from the state and local resources.

The programme would cover 231 towns in the country as a whole. In Uttar Pradesh, 24 towns have been identified for the development under the programme, out of which projects for 22 towns have been sanctioned by the central government and funds released, while projects for 2 towns are under preparation. For speedy formulation of detailed projects and their implementation, the state government has created posts of civil engineering staff in the concerned local bodies. In the state town and country planning department, 5 central units and 15 local units have been created for preparation of project reports, detailed development plans and for guiding the implementation of the projects prepared and sanctioned under the IDSMT programme. The agencies for the execution of the sanctioned projects have also been identified and coordination committees at local levels as well as state level for monitoring the progress and coordination have been set up.

Despite these institutional and financial arrangements, there are certain issues which, unless considered and incorporated at the various stages of project formulation and implementation, may affect adversely the achievement of goals implicit or as envisaged in the framework of integrated development of

small and medium towns.

It is a paradox that while the programme is known as integrated development of small and medium towns (IDSMT), its scope of integration is confined within the boundaries of the towns selected under the programme without an overall integration of human settlements in an area. Thus ostensibly, there is a fundamental conceptual shortcoming in the programme which aims at tackling parts of the settlement system without having regard to the total human settlement system. It is necessary to recognise that urban settlements have to be dealt with as a system comprising large, medium and small settlements with their interlinkages and interdependencies. While the growth of small and medium towns serving as service centres, market towns and growth centres in the rural hinterland will help to sustain the rural economy, on the one hand, and these towns have to be interrelated to one another functionally and physically, on the other hand. They will have to be developed in an integrated manner to provide for increased employment prospects, better facilities and satisfactory living environment. The Sixth Five Year Plan reiterates that settlements should not be viewed individually but should be seen in relation to one another as a total system. However, confining this programme to towns with an arbitrary limit of population below one lakh without defining their functional and physical inter-relationships, the objectives of integrated development sought to be achieved through the programme may not be fully realised.

Another issue relates to the funding pattern. Certain items of development under the programme have been identified to be financed by the central government on a matching basis while certain other development items relating to provision of infrastructure and community facilities and for improving the quality of life through slum improvement programme have been earmarked to be financed by the state government. This pattern of financing may not lead to the integration of various activities at the town level unless the programme is conceived in its totality as a composite whole and funds made available accordingly.

Small and medium towns can play a critical role in the process of urbanisation. By developing, upgrading and

strengthening the economy of small and medium towns a large-scale migration from rural areas to big urban areas can be considerably reduced. However, the selection of the towns under the programme needs careful consideration. By merely selecting towns as district headquarters or sub-divisional towns, etc., based on the size of population alone rather than on the growth potential may not activate such towns to depolarise large cities and curb the migration. What is needed is a careful selection of towns and cities in the context of regional development with growth propensities or growth impulses which can be equipped or strengthened with an economic activity and development of infrastructure. A selective approach would, therefore, be more appropriate because towns selected on the basis of above criteria would have a natural advantage of growth impulses necessary to make them act as growth centres. Such centres would have the advantage of 'spontaneous' growth.

Under the programme, the economic base of the towns is proposed to be strengthened to provide employment to population in such activities which subserve the rural economy. The scheme envisages land development, traffic and transportation and also development of markets, mandies and industrial estates and other facilities for the benefit of agriculture and rural development. In the state sector, schemes relating to water supply and sanitation, slum improvement, urban renewal and medical facilities have been included. Such type of activities will, no doubt, create substantial employment in building construction, and marginal employment in other sectors. It may be noted that major activities in the rural areas are in the field of agriculture and animal husbandry, forestry and fisheries. If the towns are to subserve the rural economy, what is needed is the provision of basic urban infrastructure and investments in such a form that will attract, sustain and promote production activities in the aforesaid spheres and also provide marketing facilities for rural surpluses. At the same time, activities which have the potentiality for generation of employment such as establishment of industrial estates, encouragement of small and household industries for consumer goods, agricultural implements and the like along with investments in communication system and

efficient supporting tertiary sector is required. The programme emphasises provision of such existing infrastructure which the urban settlement is lacking in discharge of its various functions. In this process although employment would be generated particularly in the construction activities, yet such employment will be of a temporary nature only.

Construction activities can provide employment directly or indirectly. Direct effects include the provision of infrastructure like roads, water and sewerage, street lighting, and construction of houses either by public authorities or the occupiers themselves. Both type of works create jobs directly. There are several types of indirect employment effects from actual construction. There is the general effect on the rest of the economy through income and expenditure multiplier arising from spendings on wages and profits.

Construction is an activity with high content of skilled and semi-skilled labour. Where there are serious unemployment problems we can not expect adequate supply of skilled construction labour. It follows that programme to increase 'employment' without consideration of the type of labour benefiting from it could be thwarted by shortage of skilled labour. Alternatively, the employment of certain number of skilled men on a project cannot be said to have increased total employment by the same number, if they were drawn from elsewhere and thus it is important to analyse precisely which type of work force is going to benefit from employment creating strategies.

The creation of employment through various activities requires a careful approach. The rural-urban migration which is the major mechanism for the growth of big cities is mainly directed toward the informal sector of large cities and in this process the lower order urban centres are bypassed. This causes the stagnation of small and medium towns because of the lack of employment opportunities, while the large cities face a grim situation with the increase of urban poor in such cities. Bulk of the migrants are unskilled who join the unorganised sector constituting a very large number of unskilled workers. If the aim of the programme is to divert the migration of population from large cities to small and medium towns, the programme will have to be modified so as to

include upgrading of skills, entrepreneurial development, provision of industrial estates, relocation of subsidies, availability of finances and vocational training, etc.

One of the basic tasks is to impart a measure of economic viability to the existing towns and this will be possible if the economic base is diversified by proper occupational balance. In fact, it is a task much more fundamental than any thing else. It is through the injection of additional economic activity that a small or a medium town can be made to grow to a point where it could be considered viable in terms of population, physical dimension and level of economic development. In the ultimate analysis, it is the economic instrument alone which can be wielded to mould the small and medium towns to the desired pattern.

All the smaller towns suffer from lack of basic facilities such as drinking water, sanitation and low level of social services, and all the settlements uniformly suffer from poor infrastructural development, inadequately organised distributive services and even more poorly organised economic services which have inhibited their economic growth. Though the programme for improvement of small and medium towns attempts to make these economically more attractive for the prospective rural migrants, by establishing new industrial, commercial and agro-industrial centres the quantum of this diversion may be much too low because no planned areawise programme of development of the small and medium urban centres system is envisaged within a time bound programme.

Weak infrastructure, one of the characteristics of small and medium towns can seriously impair the growth and efficiency of activities in such urban centres. As a result, the expansion and improvement of public infrastructure, traffic and transport networks, communication facilities, energy and water production and distribution works and waste collection and disposal systems have been given due place in the IDSMT programme. The central problem in expanding infrastructure is the shortage of financial resources. This implies that the capital cost of building new infrastructure has to be lowered, costs of operation and maintenance minimised and finally, more use has to be made of existing or new facilities.

The basic costs of infrastructure extension can be reduced

by lowering design standards. In water supply and sanitation, for example, there is potential for using standards that are lower in terms of convenience and are equally satisfactory in terms of health and hygiene. Costs can also be reduced by evolving construction techniques that make more effective use of local human and material resources.

It is important to realise that the funds available in the programme should be seen mostly as a catalytic agent for attracting investments from the public and private sectors. Efficiency of programming lies in regard to the extent to which it will attract supplementary resources and investments from the private sector. It is a wrong notion that the national plan or the state plan can finance the entire funds required for urban development. The programme should, therefore, be structured to take note of all the possibilities of investments of both the sectors—public and private. At the same time, the programme should be flexible and capable of being interpreted to take up priority areas in various aspects of development. If information is available about neglected investment opportunities in smaller cities, government may act as partners with private industry or even as pioneers to demonstrate the viability of invested locations.

Urban development programmes require a great deal of preparation and a large complement of trained and qualified personnel to prepare and implement the programmes. A number of studies are required to determine the priorities, establish linkages under the regional framework and appropriate activities suited to various types of individual urban centres.

Interaction of various determining factors such as increase in population, size, growth, etc., result in a wide range of conditions and their capacity to absorb population. At present, most attempts to deal with urban development programmes are based on prototype designs and guess work whereas the correct approach would be to design projects in the context of the towns concerned.

Preparation and implementation of any urban development programme or project by virtue of its nature, is an evolutionary process. Therefore, the institutional and financial strengthening of the implementing agencies also becomes

part of the evolutionary process. In this programme, while the state town and country planning department has taken over the responsibility of preparing the project and also monitoring and coordinating the development works in the field, the actual implementation of the programme will be through the local bodies of the small and medium towns. The local bodies lack the organisational structure to provide the technical tasks and at the same time their weak financial resources also call for more innovative measures for their development. The following general areas require support and strengthening:

1. Technical services,
2. Project management, and
3. Financial management.

As stated earlier, the present IDSMT programme is the first project to be taken up systematically; it will have significant effects and far reaching implications. It is, therefore, apparent that an organisational study should be undertaken with a view to identify the gaps and inadequacies to strengthen the organisations in the respective fields.

Appropriate staffing with specific emphasis on strong internal administration is an obvious prerequisite for the performance of town planning department and the local bodies to ensure that the programmes initiated under the project are executed satisfactorily and the infrastructure facilities provided are maintained adequately. This will in turn initiate overall improvement in the urban management of small and medium towns. Whatever policies, programmes and projects have been put into operation in the past have not made the full impact, since there is a conspicuous lack of vibrant and viable implementing and monitoring system. It is an emerging opinion that powerful local institutions are required to make an impact on urban scene under the urban reforms and strategies at state and national level. Moreover, the inter-agency and inter-departmental coordination in the successful implementation of the projects is an essential prerequisite which at present is virtually weak.

The development process cannot progress unless ways are:

discovered for systematically helping local communities to operate autonomously in planning for and meeting their own basic needs. People need to be organised in order to become an important force for their own development. This means that they begin systematically to identify their own needs, locate existing and new resources, and plan and organise creatively to bridge the gap between needs and resources. Awareness must be created in the people so that they take action collectively to solve the community problem in a resourceful and practical manner. This is an operational definition of self-reliance which requires the ability to act in a self-dependent manner making effective use of the greatest resources of the people themselves. □

INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS IN KERALA

MATHEW VARGHESE

The spatial organisation of settlements in Kerala is very different from that in the rest of the country. The population is distributed more or less evenly over the entire area of the state in scattered homesteads with concentration at points. The average density is 664 persons per sq. km., varying from about 900 persons per sq. km. in the coastal plain to 200 persons per sq. km. in the high lands. This pattern is common to both urban and rural areas.

In the traditional settlement system, the demand for services and amenities by inhabitants of scattered homesteads was satisfied by easily accessible activity nodes at regular intervals of 8 to 10 kms. along communication routes. These nodes comprised of non-residential activities which were urban in character, and housed services like banks, shopping centres, markets, service industries and institutions of health and education. The nodes served as vital links in the agrarian economy, not only as collection, distribution and service centres but also for the diffusion of innovations. The settlement pattern in the state has been largely responsible for the high levels of literacy and services and facilities in rural areas.

Over the last few decades a pressure on agricultural land, lack of opportunities in the primary sector and high levels of literacy have created a demand for jobs in the non-primary sectors of the economy. Consequently there has been an enlargement of functions and concentrations of population in

the activity nodes and more and more of them have been classified as 'urban'.

The enlargement and diversification of functions has, however, not been uniform. Certain nodes have developed at a faster rate because of socio-political and location factors while others have languished and have not been able to fulfil the demands made on them.

URBANISATION

According to the 1981 census, there are 106 towns in the state, 48 of these are statutory towns (3 corporations, 42 municipal towns, 1 cantonment and 2 townships) and 58 census towns. This is as against 88 towns, (3 corporations, 27 municipal towns, 1 cantonment, 1 township and 56 census towns) in the 1971 census.

In spite of high levels of literacy and lack of opportunities in the agriculture sector, Kerala is under-urbanised as compared with the country as a whole (Table 1).

TABLE 1 LEVEL OF URBANISATION

<i>Country/State</i>	<i>Urban Population as a Percentage of total Population</i>	
	<i>1971</i>	<i>1981</i>
India	20.22	23.73
Kerala	16.24	18.78

SOURCE: *Census of India, Provisional Population Tables, 1981.*

Low level of urbanisation in the state can be attributed to the limited employment opportunities in urban areas and a reasonably high level of services and facilities in rural areas. Because of well developed transport linkages there is also a high incidence of rural population commuting daily to urban areas for work. The phenomenon of large scale rural-urban migration is absent in Kerala.

The number of urban agglomeration and their population distribution by size class is given in Table 2.

TABLE 2 NUMBER OF URBAN AGGLOMERATIONS AND TOWNS IN KERALA AND THEIR POPULATION DISTRIBUTION BY SIZE CLASS, 1951-1981

Class	1951			1961			1971			1981		
	No. of towns	Population	Percentage	No. of towns	Population	Percentage	No. of towns	Population	Percentage	No. of towns	Population	Percentage
I	3	6,28,001	34.39	4	8,77,315	34.35	5	14,67,046	42.32	8	2,534,860	53.13
II	5	2,03,145	11.24	5	2,94,361	11.53	7	4,63,704	13.38	7	4,53,996	9.52
III	12	3,26,393	17.88	31	8,20,445	32.12	40	11,01,417	31.77	49	15,20,164	31.86
IV	29	4,17,469	22.86	33	4,74,065	18.86	25	3,50,630	10.12	17	2,28,378	4.78
V	27	1,86,237	10.20	18	85,096	3.33	9	74,520	2.15	4	33,531	0.71
VI	18	62,587	3.43	1	2,859	0.11	2	9,132	0.26	—	—	—
I to VI	94	18,25,332	100.00	92	25,54,141	100.00	88	34,66,449	100.00	85*	4,779,929	100.00

SOURCE: *Census of India*—Provisional Population Tables, 1981.

*Urban agglomeration consists of more than one town in certain cases. Total No. of towns is 166.

It shows that the percentage of population in class I towns has increased steadily, while that in other classes has either remained constant or declined. Even though, Kerala has no metropolitan cities, about 42 per cent of the urban population in 1971 was contained in 5 class I towns, the remaining 58 per cent being distributed in 83 small and medium towns. In 1981, 53 per cent of the population was in class I urban agglomerations and towns.

The increase in population of class I towns has been the result of better employment opportunities, extension of urban boundaries and the upgradation of towns from the lower category. The increase in population and area has, however, not been matched by an adequate augmentation of urban services and facilities. The provision of basic urban services like water supply, sewerage and paved roads has been rendered extremely uneconomical by the scattered settlement pattern which tends to continue even in cities and towns.

Small and medium towns too are lacking in urban services. In addition to that most of them face the problem of economic stagnation.

The concentration of non-agricultural economic activities in and around a few cities and larger towns is contrary to the requirements of the population distribution pattern in the state. It has thrown out of gear the settlement system where easily accessible activity nodes at regular intervals served the surrounding population.

NEED FOR A SETTLEMENT POLICY

Development plans for 15 cities and towns have been prepared by the state department of town planning. In addition to this, the regional plan for Cochin includes one city and three towns. Five more urban development plans are under preparation. Besides this, areas have been notified for detailed town planning schemes even in towns for which long term development plans are yet to be prepared. It has, however, been difficult to implement these plans because of the paucity of resources and lack of policies for resource mobilisation. Moreover, the statutory provisions for plan implementation are outdated.

It is only recently that the department has begun preparation of District Development Plan and a Spatial Development Plan for the state. There is, however, no state level policy for linking socio-economic and spatial planning and development. Even district development plans are nothing but aggregations of the programmes of different development departments with no attempt at coordination. The imbalances in the spatial distribution of economic opportunities and inadequacies in the settlement structure are largely due to firstly, the lack of integration between socio-economic and spatial planning, and secondly, the absence of national, state and regional level policies for an integrated development of settlements and their linkages.

ROLE OF SMALL AND MEDIUM TOWNS

There is a need to revitalise the settlement system in the state by locating economic activities in relation to the pattern of population distribution. The development of small and medium towns can play a crucial role in this aspect. Except for three cities and three large towns, the urban population of Kerala is distributed in 98 small and medium towns, 42 of which are statutory towns. They can play the multiple role of serving the agricultural hinterland more effectively and distributing more evenly employment opportunities in the non-agricultural sectors of the economy. Moreover, they can ease the pressure on the larger urban centres and prevent them from growing into unmanageable size.

DEVELOPMENT PROBLEMS OF SMALL AND MEDIUM TOWNS

Even though the need to develop small and medium towns as part of the overall settlement policy has been felt for some time, a concerted effort in this direction has not been possible in the past for several reasons : (i) small and medium towns have a low priority in the budgetary allocations of the state. The provision of funds for urban development are meagre and a major share of these are claimed by the three city corporations; (ii) development in agriculture

has benefited rural areas; (iii) industrial development, even though tardy, has been concentrated in and around a few large towns and cities; (iv) adhocism in locational decisions and the lack of coordination between various development departments have added to the problems; and (v) the well-developed linkages in the form of roads, railway and inland waterways have not been able to serve as catalysts for the development of these towns, rather they have helped in the concentration of activities in a few centres by making it easier for commuters to travel daily to work in the larger towns and cities.

The meagre resources of local bodies and the inability to mobilise resources from other agencies are major hurdles for the development of small and medium towns. Most of the second and third grade municipalities find it difficult to maintain even the existing facilities. They are unable to undertake any development work with their own funds. The limited powers of expenditure, difficulties in the acquisition of land for development programmes and the shortage of technical personnel for project formulation and execution have added to the problem of paucity of resources.

In 1970, the state government established the Kerala urban development finance corporation (KUDFC) with a view to solve the resource problem of local bodies. Since its inception, the Corporation has advanced Rs. 1,503 lakhs as loan to local bodies to take up 274 development schemes such as bus and lorry stands, shopping centres, markets, slaughter houses, lodging houses, offices, comfort stations and town halls. Except for a few schemes all of them are generating reasonable returns.

The KUDFC's system of financing, however, does not consider the development priorities of towns for integrated urban development. In many cases, the municipalities are prompted by the motive of making profit, while in others they are not in a position to repay the loans taken for non-remunerative schemes. For these reasons most of the schemes financed by the KUDFC are remunerative in nature.

CENTRALLY SPONSORED SCHEME FOR THE DEVELOPMENT OF SMALL AND MEDIUM TOWNS

The programme of loan assistance under the centrally sponsored scheme for the integrated development of small and medium towns has been formulated to induce the growth of these towns to enable them to act as service and growth centres for the rural hinterland and to reduce migration to metropolitan centres. The scheme provides loan assistance on matching basis to state governments and union territories for selected items of development in towns with a population of one lakh and below, as per 1971 census. Due to the limited resources available only some towns in the stated category are being considered for assistance. The selection of towns is based on their regional importance as administrative and growth centres. Preference has been given to towns that have an integrated development plan.

In addition to components for assistance on a matching basis, the scheme identifies development components for which funds would be met from the provisions of state plans.

Components Eligible for Central Assistance on Matching Basis

- (i) Land acquisition and development, residential schemes, consisting of sites and services schemes with or without core housing;
- (ii) Traffic and transportation to subserve shelter and employment projects, consisting of construction of new roads and improvement/upgradation of existing roads; and
- (iii) Development of mandis and markets, provision of industrial estates, provision of other service and processing facilities for the benefit of agricultural and rural development in the hinterland.

Components for which funds are to be found from the State but which must form part of the Integrated Scheme

- (i) Slum improvement/upgradation, urban renewal and small scale employment generation activity;
- (ii) Low cost schemes of water supply, sewerage, drainage and sanitation;

- (iii) Preventive medical facilities/health care;
- (iv) Parks and playgrounds; and
- (v) Assistance for the purpose of making modifications, wherever necessary, in city master plans to permit mixed land use.

The scheme identifies the need to lower standards to suit low resource availability and stresses on the provision of housing and infrastructure for the lower income groups.

IDENTIFICATION OF TOWNS IN KERALA FOR ASSISTANCE UNDER THE SCHEME

In Kerala, the Department of Town Planning is the co-ordinating agency for the scheme. The department had identified towns for assistance under the scheme in accordance with the guidelines of the centre. The characteristics of the selected towns are given in Table 3.

METHODOLOGY FOLLOWED FOR THE PREPARATION OF IDSMT PROGRAMMES

Programmes proposed to be undertaken with central and state assistance were prepared for all the twelve towns. The methodology followed is outlined below:

- (i) Identification of development priorities and needs of specific towns with respect to existing deficiencies and functional category;
- (ii) Formulation of development projects in consultation with local bodies. These projects are in conformity with master Plan/detailed town planning scheme proposals and aid at an integrated development of the urban area;
- (iii) Preparation of broad itemwise estimates of projects;
- (iv) Final selection of projects based on priority as well as levels and stage in the land acquisition procedure. Projects for which land acquisition procedures were at an advanced stage were given preference;
- (v) Estimation of yearly financial requirements for each project; and
- (vi) Preparation of project reports.

TABLE 3 CHARACTERISTICS OF TOWNS IDENTIFIED IN KERALA FOR ASSISTANCE UNDER THE CENTRALLY SPONSORED SCHEME

Sl. No.	Towns	Population 1971	Road Linkages	Administrative States		Financial category	Provision for Planned de- velopment
				Hierarchy in District Ad- ministration	Local Body		
1.	Tellicherry	68759	National Highway	Taluk Headquarters	Municipality Gr. I	Commercial cum service	Master Plan DTP Scheme
2.	Badagara	53938	N.H.	-do-	Municipality Gr. II	-do-	-do-
3.	Malappuram	32002	S.H.	District HQ	-do- Gr. III	-do-	-do-
4.	Tirur	32272	Other	Taluk HQ	-do- Gr. III	Market cum service	DTP Scheme
5.	Guruvayur	15863	Other	—	Township Committee	Pilgrim Centre	Sanctioned Master Plan, DTP Scheme
6.	Trichur	76241	N.H.	District HQ	Municipality Gr. I	Commercial cum service	Sanctioned Master Plan, DTP Schemes
7.	Alwaye	24067	S.H.	Taluk HQ	-do- Gr. II	-do-	-do-
8.	Perumbavoor	20888	S.H.	-do-	-do- Gr. II	-do-	-do-
9.	Perur	24393	S.H.	-do-	-do- Gr. III	Market cum service	-do-
10.	Kottayam	59714	S.H.	District HQ	-do- Gr. I	Commercial cum service	Sanctioned Master Plan, DTP Schemes
11.	Changanacherry	48545	S.H.	Taluk HQ	-do- Gr. I	Market cum service	Master Plan, DTP Schemes
12.	Kayamkulam	54102	N.H.	—	-do- Gr. III	-do-	-do-

SANCTION OF PROGRAMME BY CENTRAL GOVERNMENT

In 1979-80, project reports for all the towns except Malappuram were forwarded to the Centre for sanction. The first instalment of funds was sanctioned for Guruvayur and Kottayam in 1979-80 and released in the following year. Development programmes for Tellicherry, Badagara, Tirur, Trichur, Changanacherry and Kayamkulam were approved after revision to reduce the estimated expenditure. These towns were sanctioned the first instalment of funds in 1980-81. Subsequently, the first instalment sanctioned for Guruvayur, Kottayam, Trichur, Tirur has already been spent and the second instalment for Guruvayur and Kottayam has been sanctioned for 1981-82 in February 1982 (Table 4).

Alwaye, Perumbavoor and Parur have not been considered for assistance as they are under the control of Greater Cochin Development Authority and, as such, have some budgetary allocation for development. The development programme for Malappuram was forwarded in 1981 for sanction.

FINANCING AND IMPLEMENTATION OF THE SCHEME

As per the scheme evolved by the Government of India, development programmes of the concerned towns would be financed primarily by the internal resources of the implementing agencies, *i.e.*, local bodies and the resources provided by the state government. Central assistance is intended only to strengthen these resources.

The central government has sanctioned loan assistance of a total of Rs. 40 lakhs per town for components eligible for central assistance on matching basis. In all, the total share of the central government for the sanctioned development programmes of eight towns is Rs. 320 lakhs. This loan carries an interest of 5.5 per cent and is repayable in 25 years with a moratorium of 5 years.

The state government has already sanctioned Rs. 320 lakhs as grant to match the central government share. This has been included as a part of the Sixth Five Year Plan for the state under a separate budgetary head. The remaining expenditure of up to Rs. 20 lakhs, on these projects is to be met by the concerned local bodies.

TABLE 4 ESTIMATED AND SANCTIONED EXPENDITURE FOR THE DEVELOPMENT OF SELECTED SMALL AND MEDIUM TOWNS IN KERALA UNDER THE CENTRAL SCHEME

Towns	Estimated Expenditure of Projects			Estimated Approved by Centre for projects in C.I. 3 (Rs. in lakhs)	Approved Outlay					
					I instalment			II instalment		
	Projects to be financed by Centre (50%) & State (50%)	Projects to be financed by State (50%)	Total Projects to be financed		Amount (Rs. in lakhs)	Year	Date of sanction	Amount (Rs. in lakhs)	Year	Date of sanction
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Guruvayoor	83.12	20.77	103.89	83.12	10.00	79-80	Jan. 80	40	81-82	Feb. 82
Kottayam	99.68	136.84	236.54	89.68	8.80	79-80	"	36	"	"
Trichur	113.58	236.00	349.58	113.58	30.00	80-81	Jan. 81			
Tirur	99.98	27.50	127.48	64.50	25.20		Feb. 81			
Kayamkulam	73.28	65.22	138.50	73.28	18.80		"			
Tellicherry	71.29	99.20	170.49	67.79	36.00		"			
Changanacherry	111.00	129.57	240.57	111.00	22.00		"			
Badagara	108.05	75.80	184.45	108.05	20.00		Apl. 81			
Malappuram	114.28	187.12	301.40	711.00	170.80					
TOTAL	760.58*	790.90*	1551.48*	711.00	170.80			76		

*Excluding Malappuram.

Projects under the state sector are being implemented with financial allocation under the state plan, resources of local bodies and loan assistance from KUDFC. There is a provision of Rs. 600 lakhs for slum improvement and clearance in the Sixth Five Year Plan of the state. Water supply and sewerage schemes are being undertaken by the public health engineering department, medical facilities by the health department and development of parks and playgrounds by the local bodies. Yet, the efforts of the concerned departments are lacking coordination and budgetary provisions of local bodies for the implementation of these projects have not been finalised.

The details of estimated and sanctioned expenditure for the implementation of the scheme are given in Table 5.

The responsibility for proper utilisation of funds and for the timely repayment of principal and interest to the central government lies with the state government. To date, loan assistance from the central government has been released promptly by the state government to local bodies through the director of municipal administration. The state government has constituted committees for the coordination, monitoring and evaluation of the programme at town and state levels. Additional staff has been sanctioned in municipalities in which it was found to be inadequate.

PROJECTS AND THEIR IMPLEMENTATION

In all the eight towns the central areas, where most of the non-residential activity is concentrated, were found to be deficient in several aspects. Hence the projects formulated basically aim at the integrated development of central areas, except for a few housing schemes.

Projects included in the development programmes of the eight towns for which loan assistance has been sanctioned have been divided into two categories.

- (i) Centrally assisted projects with a matching grant from the state. These include residential schemes, development of traffic and transportation, markets and mandies, industrial estates and slaughter houses.

TABLE 5 TOWNWISE DISTRIBUTION OF CENTRALLY ASSISTED PROJECTS AND ESTIMATED EXPENDITURE ON THESE

	Tellicherry		Badagara		Tirur		Guruvayur		Trichur		Kottayam		Changanacherry		Kavankulam	
	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost	No.	Esti- mated cost
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>Residential Scheme</i>																
1	1.59	1	24.50	..	..	..	4	40.76	3	40.08	1	28.00	2	87.50	..	..
<i>Traffic & Transportation</i>																
1	3.00	1	5.00	1	46.89	1	46.89	1	12.78	..	..	1	52.78	..	1	11.78
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
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1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.89	1	5.00	..	..	..	..	..	..	..
1	3.00	1	5.00	1	46.89	1	46.8									

- (ii) Projects financed by state and local bodies. These include stadium, town halls, parks and play grounds, lorry and cart stands, slaughter houses, commercial complexes, road improvement and slum clearance and improvement schemes.

CENTRALLY ASSISTED PROJECTS WITH A MATCHING GRANT FROM THE STATE

Residential

Residential schemes have been included in the development programmes of six of the eight towns. The emphasis has been on the provision of housing and residential land for the economically weaker section and low and middle income groups. Of the total estimated expenditure, 29.23 per cent is proposed to be incurred for residential development. (see Table 5) The concerned local bodies have been approached by HUDCO which is willing to give loan assistance for the construction of houses and their disposal on hire-purchase basis.

The progress of project up to September, 1981 (Table 6) shows that expenditure on residential development was incurred only by two local bodies and forms only a small part of the total expenditure incurred. This is because of delays encountered in the acquisition of land.

Traffic and Transportation

Development of traffic and transportation facilities have been included in the programmes of all the eight towns. This includes the construction and improvement of bus stands, taxi stand, lorry and cart stands, construction of new roads and widening of existing roads. Of the total estimated expenditure, 42.5 per cent is intended for traffic and transportation (Table 5).

Implementation of these projects has made very good progress and most of the expenditure incurred till September, 1981 was for traffic and transportation (Table 6).

It has been possible to implement projects of this category because in all cases land had either been acquired for road widening and formation or the project had been proposed on

TABLE 6 PROGRESS OF CENTRALLY ASSISTED PROJECTS
(Clause 3 (a) of guidelines) Upto September 1981

Name of towns	Allotment upto 1980-81 (Rs. in lakhs)	Expenditure till Sep. 1981 (Rs. in lakhs)				Assistance required for 1981-82 (Rs. in lakhs)
		Residential	Traffic	Mandies	Slaughter houses	Total
1. Tellicherry	36.00	3.03				3.03
2. Badagara	20.00		0.73	0.10		0.83
3. Tirur	25.20		32.06	8.92	2.80	43.78*
4. Guruvayoor	10.00	2.67	9.73			12.40*
5. Trichur	30.00	3.53	26.44			31.12*
			1.15			
6. Kottayam	8.80		16.84			16.84*
7. Changanacherry	22.00		0.50			0.50
8. Kayamkulam	18.80		1.92			0.71
9. Malappuram						
TOTAL	170.80					

*The amount over and above the sanctioned amount has been spent from the resources of the concerned local bodies.

municipal land. The bus stands constructed under the scheme have started functioning and have already made an impact on the development of the area.

Markets and Mandis

Development of markets and mandis has been included in the development programmes of seven of the eight towns, since all the towns are market or commercial towns. Of the total estimated expenditure, 19.26 per cent is proposed to be incurred on these (Table 5).

Up to September 1981, however, only a small portion of the proposed expenditure has been incurred mainly because of delays in land acquisition. Tirur, where the market is being constructed on municipal land, is the only town where market development has been undertaken.

Industrial Estates

Though industrial estates have been included in the programmes of three towns and 7.18 per cent of the total estimated expenditure is proposed to be incurred on them there has been no progress up to September, 1981 (Table 5).

Slaughter Houses

These had been proposed in two towns and the work in one is in progress.

Overall Performance

Implementation of projects in a few towns, namely, Guruvayur, Kottayam, Trichur and Tirur has shown good progress. Guruvayur and Kottayam have already been sanctioned the second instalment while Trichur and Tirur have submitted the required utilisation certificate for the funds released in the first instance. It has been observed that the availability of land has been the crucial factor for the better performance of local bodies in these towns. Also except for Tirur, the experience gained from having undertaken a substantial amount of development work prior to the introduction of this scheme has resulted in better performance.

The other municipalities have not been able to fully utilise the first instalment mainly because of delays in land acqui-

tion even at the last stages. Delays in the procurement of cement and steel have also held up the work. Internal problems of municipalities have also added towards their tardy performance.

PROJECTS FINANCED BY STATE AND LOCAL BODIES

Even though these constitute a major part of the development schemes (Table 5), no coordinated resource procurement programme has been drawn up as yet. They can be funded by the state government as a part of the various plan schemes included in the budget such as slum clearance, provision of water supply and sewerage, health care, etc. Some local bodies are undertaking development of parks and play grounds. The KUDFC is advancing loans for projects like town hall, commercial complex, stadium, etc. A piecemeal approach is being followed in the implementation of these projects and unless a definite programme of financing and implementation is drawn up, integrated development as envisaged in the programme, may not be possible.

CRITICAL APPRAISAL OF THE SCHEME

Since the scheme is only in its early stages of implementation, it is difficult to assess exact nature of impact it is likely to have at different levels. In general, the following observations have been made.

State Level Impact

At the state level, the scheme as such, is not likely to have a substantial effect on the settlement pattern or the distribution of employment or population, as only eight out of 42 statutory towns in the small and medium category have been considered for assistance. At best, the scheme serves as a pilot project. The scheme, however, has created an awareness for the need to develop small and medium towns among policy makers in the state. The state government has provided in the Sixth Five Year Plan Rs. 320 lakhs as grant to match the central government's loan assistance. Besides this, the preparation of Five Year Development Programmes

for urban areas has been initiated to fit into the state plans.

Town Level

The scheme has been received favourably by the concerned local bodies, as a substantial amount of finances has been made available for development projects. Such finances would not have been available to local bodies as loans or grants from any other source. For the first time, a resource matched integrated development programme has been drawn up for implementation. Prior to this, the implementation of detailed town planning schemes and Master Plans had been on an *ad hoc* basis determined by resource availability rather than local requirements. Municipalities not included in the scheme have also expressed their desire to be included in such schemes in future.

Delays in implementation caused by lack of experience and problems in land acquisition are likely to be sorted out in time.

The scheme, once it is implemented, however, is likely to be a financial burden for the municipal authorities, if the selection of projects is not done judiciously. Except for Rs. 40 lakhs being given as grant by the state government, local bodies will have to ultimately bear the financial burden. They will have to repay the loan advanced by the central government and will have to mobilise resources for the completion of a major part of the overall programme. Since internal resources of local bodies are meagre they will have to resort to borrowing. All the projects being undertaken are not likely to yield sufficient returns to be self-supporting. Therefore, the projects have to be of a composite nature; the remunerative ones have to be planned and timed to support to a good extent the non-remunerative ones. In any case, the improvements in facilities and work places will definitely have a favourable impact on the quality of life in these towns and may justify the financial burden on local bodies.

The Lessons Drawn

The implementation of central scheme has highlighted certain aspects of urban development which have to be kept

in view for future programmes:

Firstly, it has illustrated the need to link proposals for planned development with resource availability for their effective implementation. Short-term integrated urban development programme, as formulated for this scheme, within a wider framework of master plans, detailed town planning schemes backed by a resource mobilisation and utilisation programme, are essential for all towns and cities if planned development is to become a reality.

Secondly, it has shown that only the availability of monetary resources is not sufficient for programme implementation. The availability of land and building materials at the required time and place must form a part of the programme too. This calls for an urban land policy for the state, as without this urban development is likely to continue in a piecemeal manner.

Thirdly, the scheme to be more effective, should form a part of an overall integrated national and state policy for socio-economic and spatial planning.

Finally, to yield the best results in the matter of integrated development according to a long-range overall plan framework and to safeguard the financial position of the local body, the spirit of the scheme shall be to open out an arterial network for circulation and to purchase raw land in bulk in appropriate places and for development and disposal of the same for various urban purposes in different phases.

In Kerala, even though migration to larger cities is not a matter of concern, the development of small and medium towns is an essential requirement for the creation and proper distribution of economic opportunities and improvement in the quality of life. Thus it will be beneficial to the state, if this scheme is continued and its scope enlarged to include more towns.

Every state government should have Five Year Development Plans for the urban areas to form part of the overall state Plan irrespective of the fact whether there is a central scheme or not for this purpose.

CRITICAL AREAS AND ISSUES IN THE FINANCING OF IDSMT: AN EVALUATION

DIWAKAR S. MESHRAM

With the prime object of assisting the state governments and the union territories for integrated development of small and medium towns, the Sixth Plan provides Rs. 96 crores. By supplementing local resources, and an increased investments on the provision of infrastructures and other essential facilities, the scheme proposes to provide a better environment with improved physical conditions.

PATTERN OF ASSISTANCE

The guidelines framed by the central government for the integrated development of small and medium towns have categorised the components of development in two parts: Part 'A' components are to be assisted by central government, which include land development for residential purposes, construction and improvement of roads, development of mandis/markets/industrial estates, construction of slaughter houses. Total cost of Part 'A' components is expected to be around Rupees one crore, and the central assistance given on 50 per cent matching basis, is limited to Rs. 40 lakhs or 50 per cent of the total cost of Part 'A' component whichever is less. The central assistance is given in the form of loan, carrying an interest rate of 6.25 per cent per annum, repayable in 25 years with a moratorium of 5 years. The assistance is given to the state governments and union territories.

which is to be transferred alongwith the states' matching share to the implementing agencies (mostly municipalities) within a period of one month.

Part 'B' components are to be completely financed by the state sector and the emphasis is mainly laid in the guidelines to improve the physical environment of the town by improving slums, developing parks, playgrounds and other public amenities, and providing the water supply, sewerage and drainage facilities, etc.

Total number of towns to be covered under the IDSMT scheme is 231. The town to be covered should have a population of less than one lakh, as per 1971 census. Each state and union territory has been allocated certain number of towns based on the proportion of their urban population. Selection of towns for priority development has been left to the state governments as all the small and medium towns could not be covered.

PROGRESS OF THE SCHEME

During 1979-80, the starting year of the scheme, 31 towns were given central assistance of Rs. 2.25 crores and in the year 1980-81 Rs. 9 crores were released for another 92 towns, while during 1981-82, additional 49 towns were considered and an amount of Rs. 4.86 crores was released as the first instalment and Rs. 1.51 crores as the second instalment to 12 towns covered under the programme. By the end of February, 82, the total amount of Rs. 17.62 crores has been released for the approved Part 'A' components of 173 project towns. This also includes Rs. 1.51 crores as the second instalment of the central assistance.

The progress both in terms of number of towns covered and central assistance released is far from satisfactory. Still 58 new towns for first instalment and 112 towns for the release of second instalment are to be considered. Even during the penultimate year of the Sixth Plan, an amount of Rs. 17.62 crores, i.e., 18 per cent of the total allocation of Rs. 96 crores has been released as central assistance.

FINANCING URBAN DEVELOPMENT

In general, the urban development is financed from two sources; (a) external sources include grants and loans, etc., from the state and central governments to the local bodies, and (b) internal sources which include revenue of the local body earned through its various earnings like taxes, octroi, rates, fees and fines, etc.

FINANCING PROCEDURE OF THE IDSMT

For getting the central assistance of Rs. 40 lakhs the state governments/union territories have to make commitments in terms of budgetary provision of Rs. 40 lakhs under Part 'A' component and 100 per cent of Part 'B' components. As the central assistance is released in instalments, the state governments and union territories have to submit the physical and financial progress report alongwith the money utilisation certificate received earlier for the town, before approaching for the release of next instalment.

CRITICAL AREAS AND ISSUES IN THE
FINANCING OF IDSMT

Although half of the plan period is almost over, only 18 per cent of the total central allocation has been utilised and hardly 12 towns have qualified for the release of second instalment. It makes clear that there are some impediments hampering directly or indirectly the implementation of the integrated development of small and medium towns. The possible issues which have come in the way of slow financial disbursement are:

- (a) Technical,
- (b) Administrative/Statutory, and
- (c) Financial.

Technical

The technical factors which have affected the slow financial

disbursement have been evaluated in terms of:

- (i) *Delayed decisions*: Due to lack of well defined state of urban policy, programme and strategy for the selection of the towns on priority development.
- (ii) *Technical incapability*: Barring some of the union territories, almost all the states have town and country planning departments, yet very few states could formulate the project reports as per guidelines issued by the Ministry of Works and Housing. Many of the project reports not conforming to the guidelines were returned to the states for revision.
- (iii) *Forced formulation*: There are a large number of towns for which state governments have not taken the botheration of preparing development plans and even the project formulation has been thrust upon local bodies, which too, are not equipped in matters of town planning including project formulation and project appraisal. State town planning departments were not able to assist them instantly and hence delayed project formulation and their submission has affected the slow progress of the programme including utilisation of financial allocation of the central sector.
- (iv) *Weak institutions*: Generally, the implementing agencies are the municipalities and most of them are financially weak and do not have adequate implementing machinery and experience. It is evident from the fact that although the first instalment was released in 1979-80, there are a number of towns which could not utilise even this fund and hence do not qualify for the release of second instalment.

Administrative/Statutory

By virtue of the statutory provisions, urban development is the state subject and hence the development of small and medium town is also within the purview of the state government administration. Besides, the statutory and administrative relations of the states and centre make their imprint on the financing of IDSMT. The critical points emerging need

to be highlighted are:

- (i) The selection of towns being the state subject, political decisions are playing the predominant role instead of urban policies. Number of states have come forward for replacing the approved town, which requires fresh project formulation of the newly selected town including project appraisal and its approval. The money released for the substituted town keeps lying unutilised with the states and if some of the funds have been spent on some part of the schemes that particular scheme will remain half implemented forever.
- (ii) In certain cases it has so happened that the ministry of 'local government and urban development' and 'development and planning' are two separate entities, while selection, formulation and preparation of IDSMT schemes has been entrusted to one ministry but the technical staff is attached to the other ministry creating many administrative problems. West Bengal is the typical example of such functional division. As a result, very few towns have been able to get the financial assistance.
- (iii) In some of the states, due to statutory bindings urban poor are not allowed to construct their shelters with the building material available with them under site and services schemes. It has adversely affected the utilisation of funds released for the schemes which do not yield any impact.
- (iv) After the project formulation, the concerned local bodies have to route them through their respective state governments and the latter submits them to the central government for consideration. And again if the project is approved, the amount of the assistance reaches to the local bodies through state governments. The whole procedure is so time consuming that the commencement of the programme is delayed to a great extent as the papers and funds keep on rolling in the hands of administration resulting in delayed financial disbursement and cost escalation.
- (v) Another administrative problem coming in the way

of financing of the IDSMT programme is land acquisition which takes plenty of time and delays the execution. Sometimes the implementing agencies are forced to change the project site which again needs fresh approval and has to undergo the complete procedure.

- (vi) Last but not the least, all the papers like utilisation certificates and progress report for the released money earlier are to be routed through the state governments for the release of next instalment as the centre wants specific commitment from the state government. The delay caused in getting the next instalment released also affects the financing of IDSMT programme to some extent.

Financial

The areas of financial impediments in financing the IDSMT schemes are most important and involve many critical issues :

- (i) Small and medium towns have generally poor economic base and the internal resources for urban development are almost scarce. The local bodies have to bank upon external resources for development within their jurisdiction which is at the whims of the state government when to release and how much? It has also been observed that looking at the weak economic position of the local bodies, the state governments are mostly reluctant to release matching share to these bodies fearing that the amount may be misused.
- (ii) There are financial problems at state level too. For seeking central assistance of Rs. 40 lakhs, the state government has to make specific commitment of almost Rs. 80 lakhs, *i.e.*, double the amount of central assistance (50 per cent Part 'A' component plus 100 per cent of Part 'B' component). To give an example, the approved programme of Maharashtra, under IDSMT for central assistance (Part 'A') is Rs. 1106 lakhs. Of this, the state government has to bear 50 per cent (Rs. 553 lakhs) besides state sector

schemes of Rs. 380 lakhs. It means that for getting central assistance of Rs. 553 lakhs, Maharashtra government has to make a provision of Rs. 933 lakhs (Rs. 553.00+380.00), *i.e.*, almost double the amount. Similarly, the total approved programme of Kerala under Part 'A' is Rs. 677.08 lakhs under Part 'B', Rs. 646.63 lakhs, *i.e.* for getting central assistance of Rs. 338.54 lakhs, state has to make the specific provision of Rs. 985.17 lakhs (338.54+646.63) that is again more than double the amount of central assistance.

Most of the states are unable to make commitment to the central government, due to paucity of funds in the state's budget on urban development. And as the procedure is to verify the utilisation certificate along with progress report of Part 'A' components for the release of next instalment, most of the state governments did not approach for second instalment, even though the first instalment was released in the year 1979-80, the year of the start of the programme.

- (iii) The figures of Maharashtra and Karnataka also reveal that the provisions under Part 'B' scheme (state sector) are just equal to or less than part 'A', scheme. The state governments are not in a position to make provision of a sizable amount under urban development sector vitiating the very object of integrated urban development programme.
- (iv) Moreover, the provision of Rs. 96 crores and a central assistance of Rs. 40 lakhs for each town are debatable issues. The upper limit of Rs. 40 lakhs for each town irrespective of the size of the town or its growth potential is a meagre amount for the development of the town as pointed out in the State Housing Ministers' Conference held on 5th February, 1982.

This aspect was studied for Haryana, where the cost of development of land (including land acquisition) per hect. for residential schemes works out to be around Rs. 4 lakhs, which means that if 10 hect. of land is to be developed then the central assistance of

Rs. 40 lakhs will be exhausted only on sites and services programme leaving aside the other components given in guidelines. That too the development of a 10 hec. land will benefit hardly 460 families (as in one hec. of land about 46 plots on an average could be plotted as per IDSMT schemes of Haryana.

- (v) Of course, there are some towns for which to digest the finance of Rs. 40 lakhs is also a problem. The reasons are obvious. The towns are not having growth potentials and due to this the state governments are intending to divert the allocation of Rs. 40 lakhs to other towns.
- (vi) The possibilities of cost escalation in the cost estimates at the time of project formulation are not taken seriously and after a lapse of one year, the implementing agency comes forward with the plea of increase in the cost of materials, labour, etc., seeking revision in the project cost. This changes not only the approved costs and programmes but also leads to the tendency to delete few approved schemes. Such cases are clear cut examples of weak project formulation and lack of perspective in the preparation of development programmes. Normally, the cost escalation should be taken into account in the project formulation itself like the World Bank projects. □

FACTORS CREATING EXTERNAL PRESSURES IN THE FINANCES OF THE CIVIC BODY

K.N. RAO

The rate of growth of a city and the pace of its urbanisation will show that the demands made on it, year after year, for providing civic amenities outpace its revenue growth. In the case of Delhi Municipal Corporation, (DMC), its strategic importance as the capital of India creates some extra unforeseen and immediate demands which has its bearing on its financial position.

These external features are generally common to all civic bodies. Added to these are some special features and functions of a particular civic body creating a disequilibrium in its financial management. Year after year, in executing the plan works, the additional staff has to be recruited which keeps on increasing the size of the establishment even after the plan period is over. The system puts a burden on the cost of establishment by increasing its total non-plan expenditure. At the end of the plan period, there is a wholesale transfer of the cost of extra growth in establishment created by plan to non-plan expenditure on establishment. This has led not only to an abnormal growth in establishment but also to uncontrollable growth in establishment expenditure.

Peculiar to all civic bodies is the demand made on the standard of performance of civic duties. In the metropolis of Delhi—the national capital, standards of demands are much higher than what the DMC with its own resources could justify.

Other socio-economic and political factors in the management of internal affairs of a civic body have both strong positive and negative factors. Autonomy, in the true sense of the term, should be an autonomy which encourages positive use of its freedom to do maximum good to the maximum number of people in the area of its performance. But if it converges into a group of self seeking persons with vested interests for themselves and perpetuating such vested interests, the autonomy can be self-defeating. From time to time, corrective measures have to be taken. Such corrective measures can have only a temporary effect of slowing the tide of financial deterioration.

Between the two extreme stages of financial soundness and financial collapse, there are also many intermediary stages which are neither far from the viewpoint of financial soundness nor too near to the point of financial collapse but somewhere between these two positions, there is all the time fighting to avoid financial disaster. It seems to be an inevitable and recurrent feature of financial management of almost all the civic bodies.

It is pertinent to mention here that in the last budget (1981-82) presented by the Bombay Municipal Corporation, there was a deficit of Rs. 17 crores which was proposed to be met by raising the tax revenues by Rs. 57 crores and building up a surplus of Rs. 40 crores.

Raising taxes, particularly the civic taxes, is not only a very unpopular measure but also regressive step. Taxes have a way of reaching their point of inelasticity sooner than expected and in the case of civic taxes even this elasticity is abnormally and strikingly moribund. The opposition that builds up to resist against any raising of the taxes is more intense in the case of civic taxes, less intense in the case of state taxes and least in the case of central taxes. The opposition springs from the highly vocal citizens and their leaders concentrated in a small area of a corporation or a municipality but the impact of their criticism will vary considerably from one corporation to another. In the case of Delhi, which is a highly politicised city unlike Bombay, such opposition has always been very vehement.

The Delhi Municipal Corporation in its function cannot

afford to overlook such political opposition in the planning and management of its affairs. Against this background, two important reports produced on Delhi Municipal Corporation, first, the Morarka Commission Report, and the second—P.N. Jain Committee Report, gave an insight into the financial problems of the Corporation and such problems which are peculiar only to Delhi Municipal Corporation.

The Morarka Commission Report pointed out how, year after year, right from 1962 onwards, the actual expenditure always exceeded the estimates of revenue and how the latter were increased to match the estimates of expenditure, and yet how at the end of each year, there were undischarged liabilities left. For nearly two decades Delhi Municipal Corporation has faced this problem which needed ultimate solutions. Table 1 illustrates this point:

TABLE 1 BUDGET ESTIMATES OF DELHI MUNICIPAL CORPORATION 1975-76 TO 1980-81

(Rs. in crores)

Year	Estimates proposed by the commissioner		Estimates approved by the Standing Committee		Estimates adopted by the Corporation		Actuals
	B.Es.	R.Es.	B.Es.	R.Es.	B.Es.	R.Es.	
1975-76	36.52	46.59	43.39	46.44	43.39	46.44	42.50
1976-77	45.02	49.69	46.44	50.40	46.44	50.40	43.39
1977-78	49.29	53.01	49.29	53.81	49.29	53.81	49.21
1978-79	54.19	62.49	59.69	64.64	59.69	64.64	56.05
1979-80	59.82	74.98	84.12	77.25	84.12	77.25	63.57
1980-81	70.76	86.88	84.93	89.59	84.93	89.59	74.62

Keeping the above in view, some strict measures, therefore, have to be adopted to understand the implications and practical limitations of financial control. In theory, accounts should act as the tool of administration for the day to day financial control. In practice, compilation of accounts is always two months behind and, therefore, the latest and upto-date position can never be known. The alternate method of control which must be enforced is to watch the

expenditure against the budgetary provisions strictly and the former should never be allowed to exceed the latter.

In the Delhi Municipal Corporation although this was strictly enforced, there was a very vital issue before the Corporation as how to defray other liabilities falling under other three categories:

- (a) Payment of government-loans together with arrears.
- (b) Payment of contractors' and suppliers' bills together with arrears.
- (c) Payment of money into the provident fund, pension fund together with arrears.

If all the three categories were to be adjusted straight without escalating the budgetary provisions, it would have resulted in the: (a) total stoppage of all civic works, and (b) very irregular payment of salaries. Therefore, the line of strategy adopted was:

- (a) salaries must be paid regularly.
- (b) Only essential works should be performed which led to curtailment of good deal of such other items of work as could be postponed or had to be postponed because of the difficult financial condition.

To enforce this strategy, it was decided to postpone the payment of government-loans but clear all the dues of contractors and suppliers and also make full payment to the share of pension and provident funds. Thus 80 per cent liabilities (other than repayment of government loan) could at least be cleared. Although it has been a very painful operation, it was very successful as indicated by the figures given in Table 2 and being presented in the month of March 1982, when only 15 days more are left to the close of financial year. Assuming that the claim of financial control has achieved a substantial success and, at least, 80 per cent of the control so exercised, has been effective and successful, the claim should be accepted as valid.

True, after the close of March, particularly in the month of June when all the accounts are finalised the position reveal-

TABLE 2 STATEMENT OF LIABILITIES OF SALARIES, PROVIDENT FUND, PENSION FUND, CONTRACTORS AND SUPPLIERS, MEDICINES, DIET, ETC., FOR THE YEAR 1981-82 AND PAYMENT THEREOF

(Rs. in lakhs)

Particulars	Liabilities on 1.4.81	Current Demand	Total (3-4)	Payment from 1.4.82	Balance (5-6)
(1)	(2)	(3)	(4)	(5)	(6)
Salary	(—)157.00	4900.00	4743.00	4743.00	Nil
Provident Fund	250.00	350.00	600.00	440.00	160.00 (upto 28.2.82)
Pension Fund	125.00	183.00	308.00	106.00	202.00
Contractors and Suppliers	199.00	477.00 (upto 31.1.82)	676.00	676.00	Nil
Medicines	—	215.00	215.00	215.00	Nil
Diet	—	35.00	35.00	35.00	Nil
TOTAL	417.00	6160.00	6577.00	6215.00	362.00

NOTE: Approximate demand for contractors, suppliers and medicines for February 1982 and March 1982 may be about Rs.100.00 lakhs.

ed may be slightly less spectacular than what it appears now or may be even better than what is being visualised from the statement of liabilities presented.

In the meanwhile, attention is drawn to the fact that through this kind of financial management the Corporation has succeeded in raising its financial resources by about Rs. 8 crores. This could have been an indication of hundred per cent success in the financial control exercised so effectively but two other upsetting factors have come in-between which have caused further disequilibrium:

- (a) the number of increases in the instalments of additional dearness allowance has increased the establishment expenses by about Rs. 6 crores; and
- (b) the cost of material used in the execution of works has also increased enormously.

Had there been no extra realisation of all the good and effective control so exercised it would have become totally nugatory. Therefore, it could be realised that if there was no increase in additional DA and market prices of material used in the execution of works, the position would have been substantially far better due to internal mobilisation of resources.

Therefore, the strategic points to be kept in mind are:

- (a) Negatively, the financial control should be so strict almost to the point of harshness to prevent the growth of nugatory expenditure and even must occasionally lead to the curtailment of less essential works.
- (b) Simultaneously, internal resources must be mobilised without raising taxes to take care of unforeseeable circumstances which may emerge any time during the course of financial year. ☐

THE ECONOMIC REVITALISATION OF THE INFORMAL SECTOR

E. SILIEZAR

SCENARIO

The population of India is expected to double during the next two decades, growing from 700 million (1982) to approximately 1,400 million people by the year 2001 A.D. The informal sector might reach 50 per cent of the total, namely 700 million people. Consequently, and also due to known factors of the economy, the *offer* of basic services for the population will be in growing disadvantage and imbalance with the *demand* for services, and no matter the quantum of available resources of all kinds, state might not be able to cope either with the scope or the complexity of the problem timely and sufficiently.

The urban centres of India (large, medium and small) are not islands but part of a territory, a region, a nation and the planet, which act as magnets and/or counter-magnets. It is, therefore, necessary to consider the phenomenon of urbanisation as cause and effect of inter-dependent forces and relationships of power, economy, politics, markets, etc. This complex problem in India is overwhelming because of the size of its population, whose rate of annual growth defeats whatever plans and programmes are designed to tackle the geometrical needs.

THE CORE PROBLEM

The most difficult challenge for India as a nation and for

the state will be *how to put the responsibility of the process of urban development, reasonably and equitably, on the shoulders, initiative and productive capacity of the people themselves*; not only of those who are unemployed or under-employed, but also of the economically active population living above the poverty line. The pressure will be enormous on the private sector and the public sector will confront serious political problems if funds for investment and maintenance are expected to come from taxation. Again, the geometrical growth of population is expected to increase the regional disparities and widen the development gap between rural and urban India.

Depositing the responsibility of urban development in people will demand:

- (a) A growing process of awareness of peoples's rights and duties and of their involvement and contribution to manage the course of their enterprises.
- (b) Providing people with flexible and democratic mechanisms capable of receiving the feedback and transmitting the technology services and resources which will facilitate the socio-economic and cultural development process.
- (c) *From the State and the People:*
 - (i) Education;
 - (ii) Organisation;
 - (iii) Transmission of skills;
 - (iv) Information and social communication;
 - (v) Political, legal, technical and financial support;
 - (vi) Provision of basic infrastructure; and
 - (vii) Decentralised, flexible and dynamic administration and management of the trends and process of self-help and resource coordination.

DISCUSSION

Perhaps we should query the very title of this paper: "The Economic Revitalisation of the Informal Sector" and specially the word 'revitalisation', because it is a living and

growing sector with increasing demands. Therefore, it follows a progressive course of vitalisation which is, nevertheless, degraded and impoverished by the present economic order and also by the many complex socio-anthropological barriers which still exist (religious, taboos, casteism, ethnic groups and their values). Perhaps we should ask, "*how to revitalize the primary, secondary and tertiary sectors of the economy, to meet the challenge of an informal sector which is expected to skyrocket from 350 million to 700 million people in the next two decades ?*" *Who will pay the astronomical social cost involved?*

If we are dealing with the overall development process of India, history will tell us in the next century what was the behaviour of the nation and what will be India's profile *vis-a-vis* its geopolitical role in Asia and in the world.

WHAT TO DO?

If we are confronting such rapid and enormous challenge, to be met and shaped by the people and their leaders, what could the public and private sectors do to provide minimum basic services and economic development opportunities to the informal sector? Perhaps we should establish, as a working hypothesis, that three main inputs will be basically required :

- (a) A developmental approach to people living below the poverty line which will mean getting serious with poverty eradication by abandoning the 'welfare' or 'charity' approaches.
- (b) Vitalisation and technification of civil servants and other administrators to make them the best managers and negotiators of development. Special attention should be given to front line or peripheral administrators such as tax collectors, health workers, agricultural extension workers, teachers, block development officers, etc. Those who are in direct contact with the communities of poor families and which in a majority of cases are earning very low salaries and are poorly equipped to carry out their duties, they should form work-teams and implement unified programmes

which should aim at generating processes of self-help and self-sustainability in the communities. This approach demands a different view to the present concept and organisation of the existing public administration system.

- (c) A systematic and mass approach to social communication and information as the main tool to transmit to people participatory planning, implementing and monitoring skills and methodologies. This will require a new and innovative approach to the whole process of education. In view of the scale of the problem (700 million people living below the poverty line by 2001 A.D.), priority should be given first to non-formal education and the use of mass media, with the most advanced hardware, instead of insisting in the present formal type of education, whose coverage is minimal and to a large extent irrelevant to the hunger and needs of poor families. The percentages of un-enrolment and drop-out ratios, as well as brain drain, are clear indicators which point to net losses of the national budget for education.

We are still talking of macro-figures because for the expected growth of the informal sector, India has to make enormous sacrifices to train thousands of administrators and other front-line workers. *Quality will therefore suffer vis-a-vis quantity.*

One would be tempted to suggest that India requires and demands the committed and voluntary work of individuals and groups to pull all available human resources towards eradicating the main evils of society like illiteracy, malnutrition, illness, labour bondage, superstition and lack of trade-off power due to social disorganisation. Voluntary agencies, in our feeling, are very much needed in India to educate, organise and vitalise communities and to close the communication and inter-action gap between people and its administrators, managers and politicians.

A PROPOSED SCHEME TO WORK IN, WITH AND FOR THE INFORMAL SECTOR

Since the main problem of poor families coming to live in urban centres is unemployment or under-employment, as well as ignorance and incapacity to make use of the existing economic schemes, this paper proposes that urban development plans for the informal sector should design simple matrices of micro-urban development for a determined number of people and a given perimeter of land, which would conform to the existing ecology.

The matrix might include four public services:

- (a) A market;
- (b) An industrial park;
- (c) A self-help housing programme; and
- (d) A financial corporation.

The market should be conceived as a multipurpose information, non-formal education and basic services centre, besides the regular market activities. Within a market layout, people should be able to find a cultural centre, a creche, a health centre or sub-centre, a vocational training programme, financial advice and loans for self-employment, cooperatives and housing. The market should house together health workers, non-formal educationists, social workers, marketing advisers, banking and financial workers, etc. A market could be a meeting point to coordinate social with economic development. This will cut substantially in infrastructure and, for example, the school should be the community as a whole. Locales for pre-school and basic education should be the homes, the creches, the health centres, the market.

The industrial park should provide employment to many families and use family labour in a large scale by training women, specially, to organise cooperatives and assemble parts and components of many of the products manufactured by the neighbouring industries. The organised families, living in a micro urban development area, could start their own industrial park in a modest way, at the beginning, but

with a progressive expansion. As an example we can mention textile workers of some of the squatter settlements of Delhi.

A self-help housing programme might provide employment to the majority of families of a micro-urban development area and the necessary technical and credit facilities should be extended.

The financial corporation for the informal sector might have branches in each micro-urban area and expose families to large-scale production and productivity.

A PROPOSED METHODOLOGY TO START WORKING WITH FAMILIES OF THE INFORMAL SECTOR

Urban planners and architects are always tempted to offer perfect and organised schemes by which people receive as a heavenly gift services such as electricity, sewerage, excreta disposal, housing, etc. The resettlement approach is conceived along these terms, mainly for the sake of wiping out the ugliness of a city, however, this approach creates, in a majority of cases, communities of beggars and also it kills community participation.

This paper suggests that working in the informal sector means adopting informal ways of contacting, educating, and organising the dwellers. Action should lead primarily to human development and concurrently to physical and economic development, especially because of the speed at which the informal sector will grow. There is no time to construct and provide the best services; these will have to emanate through a progressive course of upgradation from jhuggis to pucca houses, from community latrines to well designed sewerage, from community garbage disposal to organised community industrialisation of garbage, among other participatory planned and process oriented activities.

This informal approach will require the careful training of social workers, administrators, managers and technicians as well as their interventions in the communities following unified programmes. Therefore, as soon as a new group of families comes to a settlement area, no time should be lost in sending social workers to establish a profile of the socio-economic situation. Health workers should come to immu-

nise children and women, and to recuperate III and IV degree malnourished children. Educators should analyse the baseline and household surveys and initiate adult education, early child stimulation, infant feeding practices, pre-school and basic educational services using mass media such as radio, television, folklore and correspondence courses linked mainly to employment needs as well as to production and market needs. Credit and housing programmes should organise families to start building their houses, the market, the community latrines, the sewerage systems to install electricity. *These must all be participatory schemes in which people should contribute with their skills, their labour and their assuming credit and service payment.*

Similar 'multi-purpose-service-centres-cum-markets' should be designed for small and medium town development and networks of these services should be established connecting main metropolitan and counter-magnet areas. □

INDUSTRIAL GROWTH, INFORMAL SECTOR AND DEVELOPMENT OF SMALL AND MEDIUM TOWNS

R.L. PITALE

The growth of informal sector is closely linked to the industrial development and related spill over activities of the large cities and towns. The increase in urban population further provides opportunities of employment to meet the needs of city dwellers. A large group of people who are engaged partially or fully in economic activities utilizing mainly their labour power and earning meagre incomes can be put in the category of informal sector.

Studies of the growth and characteristics of informal sector have so far been confined to the metropolitan cities where it has been tried to comprehend the dimension and problems of informal sector. These studies have thrown light on the economic activities of the population engaged in informal sector and reasons for the growth of informal sector in metro cities only. The role and place of informal sector in small and medium towns has not been analysed and hence empirical evidence in this context is not available to the planners to formulate specific policies and programmes. The paper, therefore, attempts to analyse the inter-relationship between informal sector, industrial growth and development of small and medium towns with special reference to Haryana sub-region of the National Capital Region (NCR).

CONCEPTUAL FRAMEWORK

Informal Sector

It has been defined by economists as those economic acti-

vities which do not fulfil the norms of formal sector which has large scale operation, wage, employment, relatively high income, and where regulation of activities are governed by law and rules, etc. Thus informal sector may be put as residual of formal economic activities.

However, there are no defined activities which can be called informal. In fact, though one may not be able to say with certainty, it is a group of surplus population in the urban areas who take up all kinds of sundry activities to make a living either through self-employment or low paid employment. It is, therefore, very difficult to say as to which gives birth to informal sector, *i.e.*, surplus population in search of employment and income or their activities. However, it cannot be simple dichotomous informal population or informal activities and, therefore, informal sector terminology is used to take into account surplus population and their activities.

The empirical definition of informal sector in terms of small establishments employing less than 10 workers and independent workers has also been found inadequate in explaining and testing the dimensions of informal sector.

It is, therefore, proposed to place before the participants of the seminar for consideration alternative definition of informal sector highlighting the segment of population and their concomitant activities. As such, a critique of the existing definitions of informal sector has not been attempted in the paper since lot of literature on this topic already exists.

The so-called informal sector is a group of population which has no income when unemployed or earn very meagre income if employed marginally or self-employed. They are "unemployed poor and the employed poor". They take up any activity for living. One can talk in terms of 'informal population', which falls neither in the category of fully working nor in the group of non-working. This makes them very vulnerable and if formal employment opportunities do not become available to them, they create employment for themselves or gravitate to centres of employment opportunities, howsoever those may be unrewarding to maintain the physical existence.

Informal sector population as such would include marginal workers, those working in household manufacturing,

repairs, services and persons engaged in construction. This is a homogenous group of population considering their labour time disposal, type of activities and level of income earned. It is essential to analyse the reasons for the growth of informal sector both in cities and towns.

Opportunity Cost of Unemployment

The concept of 'opportunity cost' in economics relates to 'income foregone' in alternative uses. The unemployed/marginally employed person in rural and urban areas considers opportunity cost of his existing status in terms of alternative employment opportunities and avenues and income foregone thereof.

There are two aspects of opportunity cost of unemployment. In one situation, where a person is unemployed in a location and finds that regular employment is available in another location, opportunity cost of unemployment is the income/wages foregone and this prompts him to migrate to the location where he gets regular employment.

In another situation, the unemployed finds that in the other location regular employment is not available and, therefore, opportunity cost of his unemployment in different locations is the same. But in the other location there are better prospects of creating employment opportunities *vis-a-vis* his present location. Thus, the entire concept of opportunity cost of unemployment gets a different dimension. It can be interpreted as gains/incomes foregone in the face of 'employment availability' and 'employment creating activities'. The informal sector grows and thrives on 'opportunity cost of employment creation' and not on 'available employment'. Employment creation capacity of the unemployed and marginally employed is germane to growth and characteristics of informal sector.

Economic Refugees

The unemployed and marginally employed in search of employment opportunities and relatively higher income are basically 'economic refugees' who move from rural and small urban areas to large urban areas/metro-cities. The 'economic refugees' have no assets except their labour power which

would also be lost due to non-availability of work opportunities. They are reduced to the status of 'economic refugees' in their local surroundings and are forced to move to any location which provides employment opportunity and income howsoever meagre it may be to survive.

The exodus of these economic refugees from rural areas and small towns to large urban areas and metro-cities is nothing but assertion of the economic law that persons gravitate to locations where employment opportunities exist or even if they do not exist in formal sense would create the same by responding to the economic needs of the city dwellers. If these economic refugees do not fit into the formal and legal framework of economic activities of the cities, it is obviously not their fault and regularisation of illegal but fundamental activities of employment creation and income generation by the development Authorities is the reaffirmation of the economic law.

The problem is one of matching employment with location of unemployed and marginally employed. When employment opportunities are not available in rural areas and small towns, this group of people moves to metro-cities in search of employment which becomes cause of worry for city planners. If the movement to large cities is considered undesirable and costly, the alternative is to develop locations away from large cities to absorb this informal population. The growth of small and medium towns is a strategy of locating employment opportunities where the unemployed and marginally employed population exists.

Considering the growth of informal sector in metro-cities, there is a close relationship between industrial growth, increase in population and economic base of these cities. It is interesting to analyse such a relationship in case of small and medium towns. This has been done with reference to small and medium towns of Haryana sub-region of the NCR, as this will have a bearing on revitalisation of the NCR and future growth of metropolitan city of Delhi.

SMALL AND MEDIUM TOWNS OF HARYANA SUB-REGION OF NCR: RELAY CENTRES

In order to reduce population pressure of migrants to

Delhi, the small and medium towns in the vicinity of Delhi were proposed to be developed under the NCR strategy. Eight towns¹ were chosen as growth centres and twelve other towns² were also studied and identified as potential sources of growth. These centres can be termed as 'relay centres' in terms of their impact on employment generation in rural and semi-urban hinterland to match employment opportunities with unemployed and marginally employed.

As per the criterion adopted by the Task Force on Planning and Development of Small and Medium Towns and Cities based on 1971 census, out of 8 towns studied under the NCR, two towns (Faridabad complex and Rohtak) fall in the category of small cities (1 lakh to 3 lakh population), six towns as medium towns (20,000 to 1 lakh population), ten towns small towns (5000 to 20,000 population) and remaining two towns had a population of less than 5000. The position has changed as per 1981 census wherein one small city—Faridabad complex, crossed the boundary of small city. Two medium sized towns—Panipat and Sonapat—have graduated to small cities and two small towns—Jhajjar and Gohana—have shifted to the category of medium towns. Two towns which had less than 5000 population have now come under the category of small towns. The details about size of population, rate of growth of population may be seen from Table 1, and information about total main workers, marginal workers, is given in Table 2.

The informal sector is taken to be economic activities of marginally employed, those engaged in household manufacturing and working on construction works. The size of this informal sector has been considered in the light of decadal population growth rate, industrial growth in terms of factory employment and structure of industries in small and medium towns of Haryana sub-region of the NCR.

¹Eight towns: 1. Faridabad-Ballabgarh (Faridabad) Complex, 2. Rohtak, 3. Panipat, 4. Sonapat, 5. Gurgaon, 6. Rewari, 7. Palwal, 8. Bahadurgarh.

²Twelve other towns: 1. Jhajjar, 2. Gohana, 3. Hodal, 4. Beri, 5. Maham, 6. Sohana, 7. Ferozpur-Jhirka, 8. Bawal, 9. Pataudi, 10. Farukhnagar, 11. Nuh, 12. Hailey Mandi.

TABLE 1 POPULATION SIZE AND GROWTH RATE

Town	Population		Percentage Decadal Growth Rate (+)	
	1971	1981	1961-71	1971-1981
<i>A. Ring Towns</i>				
1. F.B. Complex	1,22,817	3,26,968	—	166.2
2. Rohtak	1,24,755	1,66,631	41.5	33.6
3. Panipat	87,981	1,37,953	31.3	36.8
4. Sonapat	62,393	1,09,377	36.0	75.2
5. Gurgaon	57,151	89,309	50.9	56.3
6. Rewari	43,885	51,572	18.6	17.5
7. Palwal	36,207	47,335	30.0	33.7
8. Bahadurgarh	25,812	37,485	72.3	45.2
TOTAL A	5,61,001	9,66,630		
<i>B. Other Towns</i>				
1. Jhajjar	18,947	24,246	33.1	28.1
2. Gohana	16,754	26,209	51.2	56.4
3. Hodal	14,144	18,938	34.0	32.5
4. Beri	12,336	13,491	13.8	09.4
5. Maham	10,541	11,722	13.3	11.2
6. Sohna	8,775	12,664	27.4	44.3
7. Ferozpur-Jhirka	7,962	9,400	37.9	18.1
8. Bawal	6,529	7,763	10.2	18.1
9. Pataudi	6,045	8,422	42.5	39.2
10. Farukhnagar	5,487	6,367	11.0	16.0
11. Nuh	4,730	5,862	25.0	24.0
12. Hailey Mandi	2,252	10,143	30.0	350.4
TOTAL B	1,14,502	1,55,227		
GRAND TOTAL A and B	6,75,503	11,21,830		

N.B.: Towns arranged in descending order of population as per 1971 Census.

SOURCE: (i) *Census of India, 1981*—Series 6-Haryana, Pt. I of 1981, Supplemental Provisional Population Totals, Director of Census Operations, Haryana.

(ii) *Census of India, 1971*—Series 6-Haryana, Part VI A, Towns Directory, Director of Census Operations, Haryana.

POPULATION GROWTH RATE

Of the eight ring towns, 7 towns had a very high decadal population growth rate during 1961-71 and 1971-81 except in case of Rewari which shows an almost stagnant growth rate, *i.e.*, 18.6 per cent in 1961-71 and 17.5 per cent in 1971-81 which is less than even natural growth rate of population. Similarly, in case of two towns—Beri and Gohana—the decadal growth rate of population is not only far below the natural growth rate but shows a declining trend.

All other small and medium towns have shown an increase in decadal growth rate of population and thus clearly indicates the potential to absorb not only natural increase in population but to accommodate migrant population of hinterland as is evident from the number of marginal and other workers included in informal sector.

Similarly, the number of marginal workers (defined by the Census as those who have worked for less than 183 days in a year) also shows a positive relationship between decadal growth rate of population. In Faridabad complex, where population growth rate was 166 per cent in 1971-81, the number of marginal workers was 93,385 followed by 6,544 in Gurgaon and 4153 in Bahadurgarh. Surprisingly, the number of marginal workers in Jhajjar was 4,571 while the population growth rate was 28.1 per cent in 1971-81. In case of Sonapat though the decadal population growth rate (1971-81) was 75.2 per cent, the percentage of marginal workers to total population was 1.6 per cent. Therefore, the component of informal sector is not only governed by decadal growth rate of population but also by proportion of factory workers to main workers and structural characteristics of industries in these towns.

Out of 1,35,874 marginal workers in Haryana State in 1981, 20 small and medium towns of the NCR had 1,12,193, *i.e.*, 83 per cent of marginal workers. The share of eight ring towns was 78 per cent. It is interesting to analyse this proportion of informal sector and level of industrialisation in these towns.

INDUSTRIAL GROWTH

The level of industrialisation of any location can be defined in terms of number of factories, factory employment, proportion of factory workers in total main workers as this forms core of industrial activities supported by other allied activities. These details are given in Table 2.

TABLE 2 MAIN WORKERS, MARGINAL WORKERS, REGISTERED FACTORIES AND EMPLOYMENT

Towns	Main Workers		Marginal Workers 1981
	1971	1981	
A. Ring Towns			
1. F.B. Complex	38,309	1,10,363	93,385
2. Rohtak	28,269	50,107	587
3. Panipat	22,031	42,360	518
4. Sonapat	14,911	30,850	119
5. Gurgaon	13,428	25,120	6,544
6. Rewari	10,033	13,731	345
7. Palwal	8,311	12,701	41
8. Bahadurgarh	6,683	10,661	4,153
TOTAL A	1,41,975	2,95,905	1,05,692
B. Other Small Towns			
1. Jhajjar	3,940	6,404	4,571
2. Gohana	3,761	6,735	72
3. Hodal	3,291	5,068	248
4. Beri	2,418	2,929	894
5. Maham	2,272	2,978	180
6. Sohna	2,081	3,444	112
7. Ferozpur-Jhirka	1,946	2,628	5
8. Bawal	1,397	1,873	266
9. Pataudi	1,298	1,918	113
10. Farukhnagar	1,255	1,659	72
11. Nuh	1,088	1,458	20
12. Hailey Mandi	510	2,592	3
TOTAL B	25,257	39,686	6,501
GRAND TOTAL			
A and B	1,67,232	3,35,591	1,12,193

SOURCE: *Census of India*, 1971 and 1981, Director of Census Operations.

It is clearly seen from the data that 8 ring towns have experienced rapid industrial growth (1971-80) as it is evident from an increase in the number of registered factories and the employment. These medium towns have now got an industrial base. The growth is phenomenal in Faridabad complex wherein, in a decade, the number of factories increased three times and employment in registered factories almost doubled. The number of factory workers was 213 per 1,000 population in 1980. In other towns also, the growth in registered factories and employment has been substantial during 1971-80. However, the rate of industrialisation was lagging in 12 small towns of this region.

There is a close relationship between the level of industrialisation as indicated by the percentage of workers in registered factories to total main workers and the percentage of marginal workers to total population. Higher the level of industrial growth, bigger the size of the informal sector.

INDUSTRY INTENSITY FACTOR AND INFORMAL SECTOR

The degree of industrial growth of a town can be measured as ratio of the percentage of factory workers in main workers to percentage of main workers in the population. The ratio is termed as 'Industry Intensity Factor' (IIF). The IIF calculated for small and medium towns with functional classification of the towns and percentage of informal sector population to total population is given in Tables 3(A) and 3(B).

It can be seen from the tables that the size of informal sector is positively related to IIF and decadal growth rate of population. These two parameters reinforce each other and create capacity to absorb and retain a significant proportion of informal sector population like that of the metropolitan cities. These medium towns have achieved a critical minimum of industrial and related activities. However, 12 small towns do not have this critical minimum and hence the size of informal sector population is low except in case of Jhajjar which has higher proportion of informal sector population in the face of low critical minimum of activities and stagnant/decreasing decadal population growth rate. If critical minimum of economic activities is not developed, the informal

TABLE 3(A) MATRIX OF ECONOMIC BASE AND INFORMAL POPULATION
A. Medium Towns

Towns	Functional Category of the town—1971 Census	Economic Base		Informal Population			Type of industry in which more than 50 per cent of total workers (NIC code) are working
		Percentage of main workers to population—1981	Percentage of factory workers to main workers	Decadal population growth rate 1971-81 per-centage(+)	Percentage of marginal workers & households manufacturing to total population 1981	Industry intensity factor (cols. 4-3)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Faridabad Complex	Industry	33.7 (31.2)	63.3	166.2	30.4	1.87	23,30,35, & 36 (52.7%)
2. Rohtak	Service-Trade & Commerce	30.1 (22.6)	6.0	33.6 (41.5)	1.5	0.20	20, 21, 23 (66.1%)
3. Panipat	Service-Trade & Commerce	30.7 (25.0)	14.0	56.8 (31.3)	3.4	0.45	20, 21, 24 & 33 (74.5%)
4. Sonapat	Industry-Trade & Commerce	28.2 (23.8)	23.4	75.2 (36.0)	1.6	0.82	20-21, 34, 37 (61.1%)
5. Gurgaon	Service	28.1 (23.5)	22.2	56.3	8.7	0.79	23, 30, 34, 37 (53.1%)

6. Rewari	Trade & Commerce Industry Service	26.6 (22.8)	6.0	(17.5) (18.6)	3.2	0.22	33, 34, 35 (93.7%)
7. Palwal	Services-Trade Commerce- Industry	26.8 (23.0)	3.4	33.7 (30.0)	1.5	0.12	26, 32 (64.0%)
8. Bahadurgarh	Service-Industry	28.5 (26.0)	42.2	45.2 (72.3)	12.6	1.48	30, 31, 32, 35, 36 (62.2%)

Notes : (i) Figs. in Bracket relate to 1971 Census data. (cols. 3 and 5).

(ii) Informal Sector population includes marginal workers and workers engaged in household manufacturing. Data on workers engaged in construction activities is not separately available for 1981 Census.

NIC

- 20-21—Manufacture of food products
 23—Manufacture of cotton textiles.
 24—Manufacture of wool, silk and synthetic fibre textiles.
 26—Manufacture of textile products (including wearing approach excluding footwear.
 30—Manufacture of rubber plastic, petroleum and coal products.
 31—Manufacture of chemical and chemical products.
 32—Manufacture of non-metallic mineral products.
 33—Basic metal and alloy industries.
 34—Manufacture of metal products and parts except machinery and transport equipment.
 35—Manufacture of machinery, machine tools and parts except electrical machine.
 36—Manufacture of electrical machinery, apparatus, appliances and supplies and parts.
 37—Manufacture of transport equipment and parts.

TABLE 3(B) MATRIX OF ECONOMIC BASE AND INFORMAL POPULATION
B. Small Towns

Town	Functional category of the town—1971 Census	Economic Base		Informal Population		Industry Intensity factor
		Percentage of main workers to population—1981	Percentage of registered factory workers to main workers	Decadal population growth rate—1971-81 (Percentage)	Percentage of marginal workers & households industry workers to total population	
1. Jhajjar	Primary activity (PA) Industry Services	26.4 (20.8)	—	28.0 (33.1)	20.0	—
2. Gohana	Commerce Industry Services	26.7 (22.4)	3.8	51.4 (51.2)	1.6	0.14
3. Hodal	PA-Services Industry	27.0 (23.3)	3.2	32.5 (34.0)	2.9	0.12
4. Beri	Primary Activity	21.7 (19.0)	—	9.4 (13.8)	7.4	—
5. Mahem	PA-Services Commerce	25.1 (21.5)	1.0	11.2 (13.3)	2.2	0.03
6. Sohna	Commerce Industry Trade	27.2 (23.7)	—	44.3 (27.4)	1.9	—

7.	Ferozpur-Jhirka	PA-Services Industry	27.9 (24.4)	3.0	18.1 (37.9)	1.5	0.11
8.	Bawal	Primary Activity	24.1 (21.4)	—	18.9 (10.2)	4.5	—
9.	Pataudi	Services Primary activities	22.8 (21.8)	—	39.2 (42.5)	2.0	—
10.	Farukh-Nagar	Industry—PA Services	26.1 (22.9)	—	16.0 (11.0)	3.0	—
11.	Nuh	Services-Commerce Industry	24.8 (23.0)	2.0	24.0 (25.4)	2.6	0.08
12.	Hailey-Mandi	Commerce	25.5 (22.6)	—	350.0 (30.3)	1.0	—

sector population will move to nearby areas or will go over to metropolitan areas of Delhi. Table 4 gives the IIF and informal sector population proportion in respect of 8 ring towns.

TABLE 4 INDUSTRY INTENSITY FACTORY (IIF) AND INFORMAL SECTOR POPULATION

<i>Town</i>	<i>IIF</i>	<i>Informal Sector Population as Percentage to total population</i>
1. Faridabad Complex	1.87	30.4
2. Rohtak	0.20	1.5
3. Panipat	0.45	3.4
4. Sonapat	0.82	1.6
5. Gurgaon	0.79	8.7
6. Rewari	0.22	3.2
7. Palwal	0.12	1.5
8. Bahadurgarh	1.48	12.6

When IIF exceeds one, the size of informal sector population is significant thereby indicating the employment creating opportunities generated by industries and other related activities. This also depends on the predominant activity of the town. The functional classification of cities based on 1971 census is given in Tables 3(A) and 3(B).

It may also be pointed out that the towns with a good industrial base have higher proportion of male marginal workers in total marginal workers of the towns. The percentage ranges from 75.5 percent to 31.8 per cent with the exception of Sonapat (16.6%) and Panipat (23%). The details may be seen in Table 5.

INDUSTRIAL STRUCTURE

Industry Intensity Factor of a city/town does not reveal the inter-industry structure of the town. Amongst the industry groups, some have more forward and backward linkages and thereby have capacity to create further employment opportunities. The growth of such industries gives rise to autonomous employment (*i.e.*, direct demand for labour)

TABLE 5 DISTRIBUTION OF MARGINAL WORKERS BY SEX—1981

Town	Marginal Workers			Percentage of male marginal workers to total
	Total	Male	Female	
1. Faridabad Complex	93,385	39,306	54,079	88.36
2. Rohtak	587	392	195	0.56
3. Panipat	518	191	327	0.49
4. Sonapat	119	86	33	0.11
5. Gurgaon	6,544	2,772	3,772	6.19
6. Rewari	345	134	211	0.33
7. Palwal	41	13	28	0.04
8. Bahadurgarh	4,153	3,136	1,017	3.92
TOTAL	1,05,692	46,030	59,662	100.00

SOURCE: *Census of India*, 1981-Series, 6-Haryana, Part I of 1981—Supplement, Director of Census Operations, Haryana.

and linked activities lead to adaptive and derived demand for labour to serve basic industries and the consumers.

The analysis of industrial structure of 8 ring towns [Table 3(A)] shows that the size of informal sector population is big where there is predominance of manufacture of cotton textile, machinery, machine tools and parts, electrical machinery, apparatus, appliances, supplies and spare parts. This explains a relatively big size of informal sector population in Faridabad complex, Gurgaon and Bahadurgarh. While in case of Sonapat, though the IIF is quite high, *i.e.*, 0.82, size of informal population is small as significant proportion of workers are engaged in manufacture of food products, transport equipment and spare parts only whose forward and backward linkages are relatively narrow compared to afore-said industries.

CRITICAL MINIMUM INDUSTRIAL BASE

The foregoing analysis points out that increase in industrial activity in factory sector results in multiple economic activities thereby giving rise to large size of informal sector population especially in medium towns. The growth of medium

towns has clearly indicated that these towns have the potential of absorbing growing urban population and are in fact operating as buffers to reduce population pressure on Delhi.

However, decrease in economic activities and population would reflect in contraction of growth potential of the area as is happening in case of some small towns such as Beri, Meham, Firozpur-Jhirka, Bawal and Farukhnagar and medium sized town of Rewari.

The growth of city/town depends mainly on the growth of basic activities (in case of urban areas—activities relating to household industries and manufacturing in factory sector). The empirical analysis carried out in case of Indian situation has shown a negative correlation co-efficient between changes in basic/non-basic ratio and percentage change in population overtime and the size and functions of cities³. Thus increase in basic activities causes growth of population in towns and cities and provides considerable employment opportunities.

The provision of industrial base and urban infrastructure in small and medium towns along with the growth of informal sector would help in absorbing rural unemployed and marginally employed which will maintain equilibrium in rural-urban relations. This process needs to be taken up in a systematic manner in selecting appropriate group of industries to be set up in these towns to provide basic industrial structure, to widen the base of economic activities and to generate employment opportunities. The industrial growth of medium towns of Haryana sub-region of the NCR has shown that with the increased economic activities, population of these towns has increased substantially accentuating growth in the informal sector population. In the absence of such a process, Delhi would have been invaded by migrant population of these towns and peripheral areas thus jeopardising Delhi's regulated growth completely. The economic base and especially the industrial sector of small and medium towns needs to be strengthened.

It is also essential to have an inventory of economic activities of the informal sector population and then suggest

³Misra, V.N., R.K. Wishwakarma, K.V. Sundaram, "Economic Base and Multiplier Analysis: A Study of Indian Towns and Cities", *Indian Journal of Industrial Relations*, Vol. II, No. 2, October, 1975.

measures to bring these activities in the framework of formal activities acceptable to city planners or alternatively relax, within limits, the standards of city planning to accommodate the informal sector too. This problem is still manageable in small and medium towns, while it has become completely unmanageable in metro-cities.

CONCLUDING OBSERVATIONS

In order to strengthen economic base for laying down the foundation of industrial growth in small and medium towns, it is essential to adopt a unified approach to coordinate the working of various agencies engaged in urban development.

IDSMT

The programme of Integrated Development of Small and Medium Towns (IDSMT) is a comprehensive strategy in this direction. The IDSMT, however, is being operated as a measure to strengthen the much neglected area of non-remunerative investment in infrastructure of the towns. The investment is in the nature of capital formation which has long term beneficial effects. The investment may not directly affect in-migration/out migration in these towns. This is amply clear from the components eligible for assistance in the IDSMT programme. The components are land acquisition and development, traffic and transportation to subserve the shelter and employment projects including construction of roads and improvement/upgradation of existing roads and development of mandis/markets, provision of industrial estates, provision of other services and processing facilities for the benefit of agricultural and rural development in the hinterlands.

INDUSTRIAL DEVELOPMENT PLANS

While IDSMT programme strengthens the much needed urban infrastructure, the components do not provide a push to critical minimum of economic base required for the rapid growth of small and medium towns. The industrial growth of small and medium towns can provide such a base. How-

ever, the small and medium towns have not been made sufficiently attractive for industrial investment.

The State Financial Corporations' provision of concessional finance is not oriented towards these towns. In fact, provision of basic industrial structure and its growth for small and medium towns should be the exclusive responsibility of state level finance and industrial development corporations. While their total investment and number of units set up by them have significantly increased, very little attention is being paid for the spread of industrial growth in small and medium towns.

The state corporations should be given a mandate by the state governments to industrialise the small and medium towns consciously and in a concerted and phased manner. The benefits of concessional assistance are being appropriated by big cities even within the state. The industrial development plans for small and medium towns should be prepared by the financial and industrial development corporations of the state government in association with the central government's Town and Country Planning Organisation and integrated with the IDSMT programme.

RELAXATION OF LICENSING PROVISIONS

It is also essential to divert entrepreneurs covered under licensing provision to small and medium towns by relaxing provisions in favour of small and medium towns. Differential investment criteria for licensing should be adopted to help the entrepreneurs who are willing to go to these towns. Investment criteria for industries covered under licensing can be relaxed by raising the limit to Rs. 5 crores instead of present limit of Rs. 3 crores in favour of small and medium towns. This will reduce the burden of the licensing authority for processing applications and at the same time will also help small and medium towns.

In addition, a bold step of permitting large industrial houses, without attracting the provisions of licensing Act, to invest in small and medium towns should be taken. How long the economy will depend on the autonomous investment of the government? Why not ask the private sector to parti-

cipate and allow it to operate freely at least in laying down foundations of critical minimum of economic base in small and medium towns? The increase in their assets on account of investment in small and medium towns cannot be called as socially and economically undesirable. On the contrary, the entrepreneurial base of small and medium towns would get strengthened.

URBAN FOCAL CENTRES

It is also essential to develop selected small and medium towns, if they lack potential for industrial growth, as focal centres of urban amenities and facilities. A case in point is Shahabad-Markanda village in Haryana which is becoming focal centre of urban growth. The details may be seen in the Appendix (p.200). The urbanisation of villages is possible only through the strategy of setting up focal centres in small and medium towns catering to aspirations of local people. TV transmission to small and medium towns and other modern amenities of urban life should be developed in a collective manner in selected small and medium towns.

The integration of aforesaid measures would strengthen and widen the base of economic activities to provide employment opportunities to informal sector population in small and medium towns and help to avoid economic stagnation of these towns. The growth of informal sector and employment opportunities for this group in small and medium towns would be a less costly process than ever increasing costs of urbanisation in metro cities. □

Appendix

A 20TH CENTURY 'VILLAGE' IN HARYANA*

A private nursing home, a cinema hall, two degree colleges, one of them for women, and towering television antennae are a rare sight in a village, but Shahabad Markanda village in the Kurukshetra district of Haryana has all this and more.

A prosperous village on the Grand Trunk Road, about 150 km. north-west of Delhi, Shahabad Markanda derives its name from the Markanda stream flowing past its outskirts. The village has five recognised high schools and several private schools, a government hospital, half-a-dozen cold storage plants and ice factories, two gas filling stations, an automobile workshop, a tractor workshop, a wine shop that sells choice chilled beer and liquor, a flourishing grain market and a big shopping complex.

It produces king-sized potatoes, quality basmati rice and wheat, green chillies and vegetables that find a ready market in the village and nearby towns.

Shahabad Markanda (population: 40,000) looks more like a town than a village. It has the civic amenities of a town—piped water, electricity, paved roads and a well equipped government hospital with facilities for eye surgery and minor operations.

The nursing home, with three private and two general wards, is full most of the time. It was set up eight years ago, by Dr. O.P. Mohindroo who resigned his government job. Today he earns as much in one month as he did in a whole year when he was in government employment.

The metalled road branching off from the highway and leading into the village is lined with shops on either side. A new shopping arcade has come up in the heart of the village where you can buy cloth, cosmetics, chocolates, medicines, mutton, poultry, etc.

**The Times of India*, February 2, 1982.

The more affluent farmers have built bungalows of renovated old houses and installed sanitary fittings and septic tanks.

Life began to change for the villagers with the arrival of the green revolution. It took a new turn with the formation of the state of Haryana in 1966.

Today the village has parks, playgrounds, a panchayat ghar, a huge grain market and a cinema house which exhibits the latest films, a macadamised road, linking Shahabad with Ladwa village echoes to the roar of tractors and trucks that carry the farmers' produce to nearby places.

The more prosperous farmers go about in jeeps and cars and spend their weekends in Delhi, Chandigarh, Ambala or Karnal. Their homes are carpeted and air-cooled. They keep refrigerators and cooking gas in their kitchens. □

DEVELOPMENT OF TERTIARY SECTOR IN SMALL AND MEDIUM TOWNS

KAMTA PRASAD

The term, 'tertiary sector' or 'tertiary industries', familiar to economists but not so familiar to others, stands for a large variety of services such as transport and communications, finance and trade, banking and insurance, professional services, public administration and personal services including domestic services. According to Prof. Colin Clark, the term was originated by Prof. A.G.B. Fisher of Newzealand and became widely known after the publication of his book, *The Clash of Progress and Security* in 1935. Colin Clark suggested the use of the term 'services sector' and since then both the terms have been used to describe a vast array of activities other than those in the primary and secondary sectors.

ROLE IN DEVELOPMENT OF SMALL AND MEDIUM TOWNS

The part that the tertiary sector plays in the integrated development of small and medium towns is too obvious to require much elaboration. Of the three sectors mentioned above, it is the tertiary sector which occupies a predominant position in urban areas. Activities coming under the primary sector such as agriculture, grazing, forestry, fishing and mining depend upon direct and immediate utilisation of natural resources and are, therefore, carried out at the point where the natural resources are located. While some of these activities especially mining and to some extent fishing may result in the establishment of small towns, they are on the whole, dispersed widely in rural areas. The secondary sector (or industries), which consists of all types of manufacturing both

large and small scale, may follow a different pattern since it does not use the resources of nature directly. As Colin Clark points out, the essential nature of manufacture is that both its materials and its products can be transported for considerable distances, if required. Towns—small, medium and large, therefore, tend to grow round secondary activities. However, it is important to note that the secondary sector cannot stand on its own legs alone. It requires support of the tertiary sector for procuring raw-materials, finance, credit, insurance and other inputs and also for marketing its output. Thus the tertiary sector occupies an important position even in industrial towns. But the reverse need not be true. There are several towns which are predominantly tertiary in character owing their existence to location of government offices or trading centres. Thus, of the three sectors identified earlier, it is the tertiary sector which is of critical importance for urban areas. A proper development of this sector, therefore, is a prerequisite for a proper development of small and medium towns.

The role that the tertiary sector plays in urban life will be fairly obvious, if we look at the types of activities that belong to it. The tertiary sector includes a varied list of activities such as trade, commerce, warehousing, transportation, finance, banking, insurance, education, health, teaching, music, dancing, domestic service, government administration, etc., which cater to different requirements and have markedly different economic characteristics. It includes activities which are related to production as well as those which are related to consumption. It includes highly skilled professional services like doctors, engineers, lawyers, as well as unskilled ones like domestic servants. Also it ranges from capital intensive items like housing and construction to those which do not require capital at all like petty trade. It includes personnel working in the government as well as those working in the private sector. It is, therefore, not easy to generalise about the growth and performance of this sector. As can be seen, some of the activities like transport and communications are considered so important that they constitute the infrastructure for development.

On the basis of considerable empirical evidences support-

ted by theoretical considerations, economists have derived certain conclusions regarding the behaviour of the three sectors. It has been shown that economic development leads to a decline in the relative share of the primary sector and an increase in that of the secondary and tertiary sectors in total output and employment. Data for the developed countries are given in Tables 1 and 2. These show the dominant position of the tertiary sector in employment generation as well as production of national output. Compared to the developed countries, India is far behind. The tertiary sector is not that important. However, as in other countries which have passed through the initial phase of development, the role of this sector is sure to increase in future. It would be appropriate, therefore, to take timely notice of this fact and evolve a suitable policy for the growth of this sector. In fact, the relative significance of the sector has been increasing. Data on the sectoral composition of output in India are available from 1948-49 onwards. An analysis of these data at constant (1970-71) prices indicate that the share of the primary sector has been declining and that of the secondary and tertiary sectors increasing (Table 3).

TABLE 1 PERCENTAGE DISTRIBUTION OF EMPLOYMENT
BY SECTORS AND BY COUNTRY

	<i>U.K.</i>	<i>France</i>	<i>Germany</i>	<i>USA</i>	<i>Japan</i>	<i>Italy</i>
Primary	1.9	12.9	7.5	4.3	15.9	18.0
Secondary	44.4	40.3	50.4	31.0	36.0	43.8
Tertiary	53.5	46.8	41.9	64.7	48.0	38.2

TABLE 2 PERCENTAGE DISTRIBUTION OF GROSS DOMESTIC
PRODUCT BY SECTORS AND BY COUNTRY

	<i>U.K.</i>	<i>Germany</i>	<i>USA</i>	<i>Japan</i>
Primary	2.9	2.9	3.0	6.0
Secondary	42.7	52.4	36.6	44.5
Tertiary	54.4	44.6	63.4	49.5

SOURCE: Derek E. Channon, *The Service Industries*, p. 4.

TABLE 3 PERCENTAGE DISTRIBUTION OF TOTAL OUTPUT
BY SECTORS DURING 1960-61, 1970-71, AND 1979-80

	1960-61	1970-71	1979-80
Primary	57.0	50.1	40.6
Secondary	16.6	19.7	22.7
Tertiary	26.4	30.2	36.7

Separate figures regarding sectoral break-up of national output originating in small and medium towns are not available. However, there are certain considerations which suggest that the share of tertiary sector in urban areas could be higher than that indicated by the figures for the country as a whole. As is well-known, urbanisation helps in the growth of tertiary services. While rural consumers meet a significant part of their consumption requirements through their own production especially of agricultural commodities, the urban consumers essentially depend upon the market. As Prof. Kuznets points out, the urban demand even for food has constituent of fabrication, transportation and distribution as compared to that of rural population living close to sources of food supply. "More Government services are demanded not only because of the social needs of urban life but also because of the greater complexities of economic organisation requiring Government regulation and administration. The greater specialisation and concentration on one location of production in those branches in which new technology has permitted large scale factories has meant a greater need for transportation and distribution than would have been by smaller factories serving local markets. The role of trade and to some extent of finance in covering the gap between centralised and steady production and dispersed and variable demands has obviously increased. Urbanisation leads to much greater demand for services like sanitation, public health, education, etc." The structure of consumer demand in urban areas is also biased in favour of services with the result that a rise in per capita consumer income leads to an increase in the demand for recreation, health, education and other professional services. Greater use of consumer durables like car, scooter,

refrigerator, etc., has led to a very large increase in the demand for repair activities. Shifts in commodity production and in associated patterns of living have greatly increased the demand for products of the services sector.

The Role and Service Function of Small Towns

The small and medium towns provide services not to their own population alone but also to the surrounding rural areas. The modern agricultural technology which has ushered in the green revolution has increased the demand for services like supply of improved seeds, fertilizer, pesticides, credit and technical advice on the one hand, and marketing of agricultural produce on the other hand. The rise in rural income has led to an increase in rural demand for urban/industrial products and for services like education, health, etc. The increase in facilities for transport and communication and in governments machinery in rural areas has further added to the importance of the tertiary sector. Modern development have increased the importance of activities like scientific dairying, collection, storage and marketing of eggs, meat, hides and skin, fisheries and fisheries' products which though based on primary products, are usually carried out in small and medium towns. There is some evidence to show that the tertiary activities far from being dispersed in villages tend to be located in nearly small and medium towns. Thus, according to the findings of an empirical research study conducted by the Institute of Applied Manpower Research, New Delhi, in two selected regions situated in the states of Haryana and Uttar Pradesh, the tertiary activities declined in selected villages as a consequence of agricultural development in those villages. From villages, the tertiary activities got concentrated in nearby urban centres from where they serviced the surrounding rural areas. The integrated growth of small and medium towns should be planned taking due consideration of these.

Tertiary sector has a good potential for providing employment to the unemployed who constitute a significant proportion of the population of small and medium towns. The share of tertiary sector in employment has been steadily growing in a number of countries such as

USA, Canada, Japan and the USSR. By now about 45 per cent of employment is provided by this sector in the industrialised countries. In contrast, the share is around 20 to 25 per cent in the middle income and developing countries. It was around 16 per cent in India in 1971. It is well known that the capital requirements of a number of activities in this sector are very little so that they are especially suited for providing self-employment to weaker sections of the society. Tertiary sector, throughout the world, provides a good scope for employment of women and thus helps in supplementing family income. Urban women prefer working in services like teaching, nursing, telecommunication, administration, etc., to working on machines. Growth of tertiary sector is thus needed for assisting the growth of other sectors and for providing an avenue for employment of fast increasing manpower which can not be absorbed in primary and secondary sectors alone.

Effective Distribution and Management of Services

Services also constitute an important constituent of the consumption basket of urban population. Non-availability or inadequacy of some of the essential services like good educational facilities, medical aid, clean air, drinking water, a good sewerage system, suitable means of transportation, etc., have been one of the most important reasons for the prevailing stagnation and decay of small and medium towns. Requirement of the people especially of the weaker section for such essential commodities as food grains can not be met satisfactorily without a network of fair price shops. The urban elite which has to play a vital role in the process of development has come to give a high value to modern facilities like telephone, good education for their children, technical training, good places of recreation, and easy availability and maintenance of consumers' durables. However, there are problems regarding availability of all these services in small and medium towns. In the absence of adequate repair and maintenance services, equipments including consumer durables remain idle resulting in loss of production and consumers' satisfaction. There is no doubt that the small towns can not develop if the essential services remain neglected. The importance of this consideration increases further when we note

that the tertiary sector is not just a determinate of other sectors but is also a determinant. Services like transportation, marketing, banking and insurance perform a positive role in the productive process and may be allowed to grow slightly ahead of the growth of other sectors. Inadequacies of these services have been found to be a drag on economic expansion and, therefore, should be taken care of even at the risk of a little under-utilization of their capacity in the short run.

SCOPE FOR EXPANSION

Certain services like provision of drinking water, education and health are considered so important that they have to be provided irrespective of the level of income. This, indeed, is the philosophy behind the adoption of the minimum needs programme. Services related to the programme, should, therefore, be given the highest priority in the development of small and medium towns. The problem here is how to provide and expand these services at less cost and ensure high quality. The quality of educational and health services as provided by government agencies has been found to be low while the cost has been high. How to take care of this problem of low quality and high cost? Should these be decentralised? What changes in organisation and management one can think of?

There is a good use for services related to production in primary and secondary sectors in nearby rural areas. These would include marketing, transportation, banking, finance, etc. Since agriculture and allied activities such as animal husbandry, forestry, fishing, irrigation, rural electrification, and rural industries constitute some of the most important productive activities in rural areas, services related to these such as supply of inputs, credit, processing of agro products, warehousing and marketing of such products would receive prior attention.

Services like tourism can be developed independently of the level of production in the area. These may indicate scope for development of hotels and restaurants and the like.

Services which require less of capital and more of labour

would naturally have a higher claim for support in our country. However, most of such services like domestic service and petty trade are those where productivity and earnings are very low. It is also known that a part of the employment in some of these services is of the nature of disguised unemployment. People work because they have nothing to do. Bulk of the petty traders and shopkeepers, washermen, barbers, etc., who constitute a sizeable fraction of the personnel employed in the tertiary sector in rural areas belong to this category. We are clearly not interested in the growth of the tertiary sector, a type, which is just an outlet for the vast majority of the reserve army of the unemployed. Our interest would be in those areas which provide scope for productive employment.

NECESSARY CONDITIONS FOR GROWTH

Tertiary sector should be productive enough to provide sufficient earnings above the subsistence level. Without rise in productivity, a mere increase in this sector's employment will not ensure high wages and raise people above poverty line. This would require technical and managerial improvement. How to bring this about should be a major issue before this seminar. We are interested more in simple devices which do not require much capital and have the potential for widespread applications on a mass scale. What improvements in management system are needed? What should be the mix of activities? I feel that government support to tertiary sector must insist on payment of minimum wages to workers and must take into account minimum levels of earnings for the self-employed. This is likely to provide an incentive for the selection of activities and techniques providing employment at higher levels of productivity.

Education especially technical and managerial education, is one of the most important conditions for the growth of tertiary sector. Training must be job-oriented. Programmes like TRYSEM¹ should be extended to small and medium towns and should have adequate facilities for upgradation

1 . Training the Rural Youth for Self-employment.

of skill in the tertiary sector. The courses of study of the industrial training schools, polytechnics, etc., should also be reviewed to incorporate such training. With regard to job oriented training, a question that arises here is what view to take if jobs cater to the demands of the luxury sector on account of skewed distribution of income?

Credit is an essential input for the growth of any activity. Credit facilities should, therefore, be extended to tertiary activities and appropriate guidelines evolved by banks.

There is very little knowledge about the existing status of the tertiary sector and especially about the manner in which it responds to development. Information on other aspects such as composition is also very meagre. Improved planning would require a sound base of data, information and studies. It is, therefore, necessary to collect the required information and analyse it systematically with the help of research workers and institutions.

Barring certain public utilities like electricity, water supply, public transportation, etc., the bulk of the tertiary sector has traditionally been in private hands and that too in informal sector. Government hardly provides any organisational support and package of assistance for the development of the small and tiny units coming under this sector. Government should, therefore, come forward in a big way to help the small unorganised units in the tertiary sector. To start with, the benefits which are available to SSI units should also be made available to the tertiary sector units. There is also an urgent need for development of infrastructural facilities for this sector. It may consist of small sheds, provision of electricity, water supply and drainage and pavement. These infrastructures can be provided by separate corporations established for this purpose or extending the activities of the existing corporations or by a department of the government or by municipalities. The purpose is that these infrastructures should be in reasonably good conditions and be available to the beneficiaries at subsidised rates. Banks have to play an important role in developing the tertiary units in the informal sector. The following changes in credit policy are suggested

so that banks can perform this role most effectively:

- (i) As in the case of SSI sector, the banks may be asked to lend a minimum of 12.5 per cent the total tertiary sector credit to weaker sections by March, 1985.
- (ii) Banks should adopt the concept of weaker sections based on income criterion, *i.e.*, persons below the poverty line.
- (iii) In order that bank lending is not pre-empted by better off customers like transport operators, it is necessary that the amount of composite loan advanced per borrower should be reduced from the prevailing limits of Rs. 25,000 to Rs. 10,000.

Lastly, there is a need for appropriate organisation. The activities coming under the tertiary sector are presently being looked after by a number of departments in the government. The range is so wide that no single department can take care of them. What is possible is that the department dealing with small and medium towns at the centre and in the states should have a cell for coordinating the work related to the development of this sector in rural areas. The cell should obtain relevant information including that on progress and performance of schemes and programmes, should sponsor and coordinate studies, convene inter-departmental and inter-state seminars and do such other works as may be expected of a nodal unit.

This is not the end of the matter. There are a number of other ways through which tertiary sector may be developed. The seminar participants will certainly throw light on some of them. □

EUTROPHICATION IN UDAIPUR LAKES: EVIDENCES AND PROGNOSIS

L.N. VYAS, S.K. SANKHLA and D.K. BILLORE

Of all the substances that are necessary to life, water is by far the most important. Life and water on this planet are inseparable. Water is not only a major component but also a medium and the best solvent on which all organisms depend for their existence.

In view of the significance of fresh water environment on earth, the studies related to biological, physical and chemical components of the fresh water ecosystem are kept within the purview of man and biosphere programme. The UN water conference held on March 1977 at Argentina deemed it proper to designate 1981-90 as the International Water Supply and Sanitation decade. The inland freshwater ecosystem can be treated as an integral part of human society in several ways such as a source of drinking water, irrigation of agricultural fields, recreational and navigation activities and a cheap source of input of domestic and industrial sewage.

With the passage of time, man has been accelerating the input of nutrients into lakes from agricultural fertilizers, sewage, detergents and industrial wastes—leading to shallowing of these systems through the process of cultural eutrophication. If we continue to destroy this natural resource by polluting it, the very existence of humanity in this world will be jeopardised.

The concept of eutrophication was first introduced by Weber in 1907 to describe the nutrient conditions determining the flora of German peat bogs. Since then several founders of Limnology (Naumann, 1919; Pearsall, 1921; Strom, 1930) have used this. By combining the concepts of trophy

as suggested by these workers, we can conclude that eutrophication is the process of ageing of the lakes which manifests in the following directions:

- (a) Siltation, and
- (b) accumulation of nutrients such as nitrogen, phosphorus and minerals.

Since the introduction of the concept of eutrophication by Weber (1907) several indices (Ohle, 1934; Hygaard, 1949; Zafar, 1959; Rodhe, 1969, etc.) using various physico-chemical and biological parameters have been suggested to assess the trophic status of a lake.

The nature has been generous to environs of Udaipur in providing a large number of surface water bodies which fulfil mankind's most of the necessities related to drinking water, irrigation and recreation.

The climate of Udaipur is more or less tropical. The average annual rainfall for the last 30 years has been reported to be 660 mm distributed over 35 rainy days. The average mean monthly minimum temperature (6.5°C) and mean monthly maximum temperature (41.4°C) are usually recorded in January and June respectively.

METHODS OF STUDY

For analysing physico-chemical characteristics of water, standard methods as described by APHA (1976) were followed. Turbidity was determined with the help of Toshniwal Turbidity Meter.

The collection of phytoplankton was made by a net made of bolting silk cloth having 50 meshes/cm. Quantitative estimation of phytoplankton and other algae was done with the help of haemocytometer counting chamber and the values are expressed as per ml. of original sample (Welch, 1948).

The productivity of macrophytic community was computed by adding the increment in the biomass of each species during the two successive months (Kelly, *et al.*, 1969).

Physico-chemical Characteristics of Lake Water

- (i) *Turbidity*: Data recorded in Table 1 indicate that during

the year 1979 the values for turbidity ranged between 6 per cent (February) and 40 per cent (August). It is also apparent that this parameter exhibited an increase of 9 per cent in the period of last 11 years.

(ii) *pH*: The water of the lake studied was observed to be alkaline throughout the year. It is apparent from the data recorded in Table 1 that the values for pH were observed to be maximum in June and minimum in December (7.34) and that there is an increase by 2.3 per cent in an average pH values of 1979 over the values for the year 1968.

(iii) *Chloride*: In the presently investigated lake the concentration of chloride during 1979 (Table 1) was observed to vary between 65.60 ppm (January) and 124.32 ppm (June). This parameter depicted an increase of 5.8 per cent over the value of 1968.

(iv) *Hardness*: It is perceptible from the data recorded in Table 1 that the values for hardness were observed to be maximum in June (431.8 ppm) and minimum (228.8 ppm) in December. Hardness values have shown an increase of 7.6 per cent during the last 11 years.

(v) *Calcium*: The maximum and minimum values for calcium for presently investigated lake was recorded during June (23.82 ppm) and December (5.01 ppm) respectively. It showed an increase of 15.8 per cent during the last 11 years.

(vi) *Magnesium*: Concentration of this element was observed to be maximum (18.10 ppm) in June and minimum (4.50 ppm) in November. Magnesium showed an increase of 36.2 per cent during the last 11 years.

(vii) *Sodium and potassium*: Table 1 indicates that both these elements were observed to be maximum and minimum in summer and rainy seasons, respectively. Sodium was observed to be maximum (17.0 ppm) in May and minimum (2.5 ppm) in August and showed an increase of 18.4 per cent during the last 11 years. Potassium was observed to fluctuate between 1.0 ppm (September) and 7.0 ppm (June) and it showed an increase of 15.4 per cent during the last 11 years.

(viii) *Nitrate-nitrogen*: A perusal of the data (Table 1) reveals that the concentration of nitrate-nitrogen was maximum in rainy season (1.19 ppm, August) and minimum in summer season (0.34 ppm, June). Nitrate nitrogen values.

showed an increase of 15.0 per cent over those of 1968 values.

(ix) *Phosphate Phosphorus*: Table 1 reveals that phosphate-phosphorus concentration was maximum (0.73 ppm) and minimum (0.27 ppm) in August and February respectively and further that there was an average increase of 21.6 per cent during the period of 11 years (1969-1979).

(x) *Specific conductivity*: Specific conductivity was observed to be maximum in summer season (0.470 mMHos, June) and minimum in winter season (0.14 mMHos, December). Specific Conductance values have shown an increase of 20 per cent over those for the year 1968.

Biological Characteristics

(a) *Phytoplankton*: During 1979 in all 41 species were observed to constitute the phytoplankton community (Table 2) of which 18 belonged to Chlorophyceae, 13 to Myxophyceae, 8 to Bacillariophyceae and 2 to Euglenophyceae.

On the basis of density, different groups of algae can be arranged as follows:

	Chloro- phyceae	> Myxophy- ceae	> Bacillario- phyceae	> Eugleno- phyceae
(individuals/ ml/yr)	38,304	33,117	23,940	6,916

(b) *Macrophytic weeds*: Data presented in Table 2 suggest that the macrophytic community of the lake studied include 14 species, of which 3 are of floating type, 7 of submerged type and 4 of emergent type. *Eichhornia crassipes*, *potamogaton pectinatus*, *Hydrilla verticillata*, *Najas minor* and *Myriophyllum spicatum* were the perennial species.

Observations presented in Table 2 further reveal that net community production of macrophytes during 1979 was 681.91 g/m²/yr in comparison to 560.28 g/m²/yr during 1968. This suggests an increase by 21.7 per cent.

Eutrophication

(i) *Evidences*: Various physico-chemical and biological characteristics observed were used to calculate the indices of

TABLE 1 PHYSICO-CHEMICAL CHARACTERISTICS OF PICHHOLA LAKE DURING THE YEAR 1968 AND 1979

Sl. No.	Characters	Year 1968			Year 1979			Percentage of increase
		Min.	Max.	Average	Min.	Max.	Average	
1.	Turbidity (%)	6 (Jan)	38 (Sept)	22	6 (Feb.)	40 (Aug)	24	9.0
2.	pH	7.2 (Jan)	8.5 (June)	7.85	7.34 (Dec)	8.73 (June)	8.03	2.3
3.	Chloride (ppm)	50.6 (Dec)	110.32 (May)	80.45	65.60 (Jan)	124.32 (June)	85.2	5.8
4.	Hardness (ppm)	215.7 (Dec)	410.7 (June)	313.2	228.8 (Dec)	431.8 (June)	337.3	7.6
5.	Calcium (ppm)	5.01 (Dec)	20.35 (Jan)	12.68	5.01 (Dec)	23.82 (June)	14.62	15.8
6.	Magnesium (ppm)	4.50 (Nov)	18.10 (June)	11.30	4.86 (Dec)	23.64 (June)	15.43	36.2
7.	Sodium (ppm)	2.5 (Aug)	17.0 (May)	9.5	3.5 (Aug)	20.00 (June)	11.2	18.4
8.	Potassium (ppm)	1.0 (Sep)	7.0 (June)	4.5	1.0 (Aug)	8.0 (June)	5.2	15.4
9.	Nitrate, Nitrogen (ppm)	0.2 (June)	1.03 (Aug)	0.61	0.34 (June)	1.19 (Aug)	0.70	15.0
10.	Phosphate-Phosphorus (ppm)	0.1 (June)	0.65 (Aug)	0.37	0.27 (Feb.)	0.73 (Aug)	0.45	21.6
11.	Specific conductivity (mMHOs)	0.10 (Jan)	0.39 (May)	0.25	0.14 (Dec)	0.47 (June)	0.30	20

eutrophication which are presented in the following table.

<i>Index</i>	<i>Value</i>	<i>Trophic State</i>	<i>Author of Index</i>
Calcium	14.57	Eutrophic	Ohle (1934)
Monovalent: Divalent	0.5	Eutrophic	Zafar (1959)
Primary productivity (g/m ² /yr)	100.40	Eutrophic	Rodhe (1969)
Myxophyceae	4.06	Eutrophic	Nygaard (1949)
Chlorophyceae	0.58	Eutrophic	Nygaard (1949)
Euglenophyta	0.2	Eutrophic	Nygaard (1949)
Compound	11.54	Eutrophic	Nygaard (1949)

TABLE 2 BIOLOGICAL CHARACTERISTICS OF PICHHOLA LAKE DURING THE YEARS 1968 AND 1979

<i>Characters</i>	<i>1968</i>	<i>1979</i>	<i>Percentage of increase</i>
Total phytoplankton species	c 29	41	
Chlorophyceae	9/13832	18/38304	176.8
Bacillariophyceae	11/16492	13/23940	45.11
Myxophyceae	66/14902	8/33117	122.22
Euglenophyceae	1/1330	2/6916	419.5
Dinophyceae	1/798	—	—
Chrysophyceae	1/665	—	—
Total phytoplankton density (individuals/ml/yr)	48019	102277	112.9
Macrophytic production (g/m ² /yr)	560.28	681.91	21.7

All the indices suggest that the lake is of eutrophic nature.

(ii) *Causes*: The causes of eutrophication in the present case may be ascribed to the impact of human interference, some of the more important of them are as follows:

Siltation

Deforestation in the catchment area accelerates soil erosion leading to increased siltation in the lakes. In addition to this quarrying of stones and new settlements (residential as well as commercial) on the hillocks around the lake (where once thick wooded vegetation occurred) are also increasing siltation.

Accumulation of Nutrients

Nitrate and phosphate fertilizers are used in huge quantities to increase agricultural outputs. A part of these inorganic salts which are not utilized by plants is washed into the lakes through streams during the rainy season. According to Sylvester (1961), the domestic sewage is one of the important sources for the increase in the nitrate content and human and domestic cattle excreta for the phosphates. These contribute to the nutritional enrichment of the lake water thereby favouring thick algal bloom and productivity of the aquatic weeds.

There are several synthetic compounds which are sprayed on land and water crops to kill the pests. These are not completely consumed by target species and often pass on in relatively unbroken and lethal condition to other trophic level organisms causing highly injurious effects.

Sewage

All the settlements situated on the bank and the Hotel Lake Palace situated in the heart of Pichhola lake discharge their waste water and sewage effluent directly into the lake. Presence of large amount of chloride in the water of this lake is suggestive of pollution by organic matter chiefly of animal origin (Adoni, 1975). The concentration of chloride in this lake speaks of medium pollution (Dhakar, 1979).

In such sewage polluted waters heterotrophic members become dominant. In the absence of oxygen, anaerobic process occur in which fermentation of carbohydrate and sugar and putrefaction of protein take place. In such a break down of proteins, hydrogen sulphide is produced which bubbles out giving foul smell.

Detergents

Unlike soaps, detergents are not easily decomposed by bacteria and are richer source of phosphates that hasten the process of eutrophication.

Consequences

The health status of an individual, a community or a nation is determined by the interplay and integration of two ecological universe—the internal environment of man himself

and the external environment which surrounds him. According to the modern concept, diseases are due to a disturbance in the delicate balance between man and his environment.

The demographic growth and fast urbanization all over the world are bringing profound social and environmental changes. Therefore, the attainment of a healthy environment is becoming more and more complex.

The twin problems of environmental sanitation are : (a) lack of safe drinking water in many areas of the country, and (b) disposal of solid waste—as the accumulated solid wastes undergo fermentation and favour fly breeding, garbage in refuse attracts rats and there is possibility of water pollution if rain water passes through deposits of fermentive refuse.

The causes of most of the diseases in India are deeply rooted in the environment. Therefore without basic changes in the environment especially with regard to water supply, sewerage, wastes disposal and vector control, a major reduction in the morbidity rate can not be expected to occur.

On account of unsafe and polluted drinking water, the water-borne diseases as shown below are very common in the town of Udaipur (Agarwal, 1980):

Disease	Infective agent	Number of patients in the years		Percentage of increase in number of patients
		1976	1980	
Gastro Enteritis	Bacterial	890	921	3.48
Diarrhoea & Dysentry	„	3031	3664	1.12
Typhoid	„	305	380	24.6
Amoebiasis	Protozoal	3010	3927	30.46
Infective Hepatitis	Viral	222	285	28.37

A close look of the data for the number of patients recorded in OPD of General Hospital, Udaipur during 1976 and 1980 as reported by Agarwal (1980) reveals that there is an increasing trend in the water borne diseases.

The number mentioned in the above Table can not be taken as final since there are about nine more dispensaries, ESI

hospital and Ayurvedic hospitals in the town where a large number of patients from Udaipur town get the medical aid.

The eutrophication of the presently investigated lake and contamination of drinking water causing severe water borne diseases need serious consideration. The planning system, as we have known, had given scant attention to the absorption capacity of a given environment on any level. This is particularly apparent in case of residential areas where either lower or higher land utilisation results in disadvantages to the community as a whole.

The government and the international agencies alone can not tackle this problem. It has been realized that there are a number of acts and legislations which relate directly or indirectly to environmental protection. The participation of people in implementation of these acts is most vital. The awareness of people is most important. It is, therefore, necessary to enthuse voluntary organisations and to involve in the programme, people's participation through health education by discussions or visual aids.

REFERENCES

- A.D. Adoni, *Studies on Microbiology of Sagar Lake*, Ph.D. Thesis, Saugar University, Sagar, 1975.
- D. K. Agarwal, *Personal Communication*, 1980.
- A.P.H.A., *Standard Methods for the Examination of Water and Waste Water*, 14th Edition, American Public Health Association Inc., New York, 1976.
- M.L. Dhakar, *Studies in Some Aspects of the Hydrobiology of Indrasagar Tank*, Udaipur (South Rajasthan), Ph.D. Thesis, University of Udaipur, Udaipur, 1979.
- J.M. Kelly, P.A. Opstrup, J.S. Olsen, S.I. Auerbach, and G.M. Van dyne, *Models of Seasonal Primary Productivity in Eastern Tennessee Fastuca and Andropogen Ecosystems*, Oak Ridge National Laboratory Report, 1969, pp. 4310-296.
- E. Naumann, "Nagra Synpunkte Anagaende Limnoplanktons Okologi mad Sarskild Hansyn till Fytoplankton, *Ev. Bot. Tidskr.* 13, 1919, pp. 129-158.
- G. Nygaard, "Hydrobiological Studies on Some Danish Ponds and Lakes," Part II, The quotient hypothesis and some new or little known phytoplankton organisms, Kongel, Danske Vidensk, Selskab, Biol. Skrift, 7, 1949, 293 p.
- W. Ohle, "Chemische und Physikaliache unter Suchungen Norddeutscher Seen," *Arch. Hydrobiol.* 26, 1934. pp. 386-464.

- W.H. Pearsall, *The Development of Vegetation in the English Lakes Considered in Relation to the General Evolution in Glacial Lakes and Rock Basins*, Proc. Roy. Soc. 92, 1921, pp. 259-284.
- W. Rodhe, *Crystallization of Eutrophication Concepts in Northern Europe. In Eutrophication: Causes, Consequences, Correctives*. National Academy of Sciences, Washington, D.C., 1969, pp. 50-64.
- K.M. Strom, "Limnological observations on Norwegian Lake", Arch. Hydrobiol, 21, 1930, pp. 97-124.
- R.O. Sylvester, *Nutrient Content of Drainage Water from Forested, Urban Agricultural Areas*. Tech. Rep. Taft. Sanit. Engg. Center W-61-3, 1961, pp. 80-88.
- C.A. Weber, *Aufbau und vegetation der Moore Norddeut Schlands*, Beibl. Bot. Jahrb., 90, 1907, pp. 19-54 (Suppl. to Bot. Jahrb. 40).
- P.S. Welch, *Limnological Methods*, Balkiston Co., Philadelphia, Toronto, 1948.
- A.R. Zafar, "Taxonomy of Lakes," *Hydrobiologia*, 13, 1959, pp. 287-99.

ENVIRONMENTAL SANITATION AND SOLID WASTE MANAGEMENT

V. GOPAL

This subject being very complex in nature, it requires to take a lot of finer details. To start with the subject, I am compelled to compartmentalise the whole subject into five sections, by taking the alphabets of my name GOPAL, and making them as a guide to the points for considerations in this paper:

- G—General introduction of the subject
- O—Origin of the solid waste
- P—Proper storage and transportation
- A—Alternate methods of disposal
- L—Lastly—conclusion.

'G' STANDS FOR GENERAL INTRODUCTION

Integrated Development of Small and Medium Towns

We must develop small and medium towns for many reasons.

There is always the trend for the people from small towns to migrate to larger cities and metropolises. This will not only cause impediment to the development of small and medium towns but it also imbalances the growth limitation of larger cities. This migration is mainly because of the 'push' factors of the smaller towns and 'pull' factors of larger cities. Unless and until the 'push' factors are controlled by improving the conditions of small and medium towns in all respects, and make the 'pull' factors of the larger cities less attractive,

the migration to large cities cannot be controlled. The migration can be attributed to certain factors like availability of reasonably developed infrastructure, increased employment potential, better educational and recreational facilities and growing trade and commercial opportunities in larger cities. An integrated approach to development of small and medium towns can better the living conditions of those people and thereby control migration to larger cities and metropolises.

Water supply and sewerage systems are the important factors which contribute to the cleanliness of the cities to a great extent. Yet we are very backward in this direction; out of 2921 urban places only 1535 have a developed system of protected water supply (1971 census), that too, with inadequate quantity. Not all towns and cities are fully sewered. Surface and manual disposal is, therefore, the most widespread system, prevalent in our cities. Hence, of the many development schemes very urgently needed, one is to provide healthy environmental sanitation and proper solid waste management.

Environmental Sanitation

Environment is the surrounding where a man lives. There is a:

- (i) Physical environment;
- (ii) Biological environment; and
- (iii) Socio-economic environment.

We are mainly interested in the biological environment, in the sense, that man as a biological entity lives in the midst of millions of other biological organisms. Some of these organisms have established symbiotic relationship with man while many other have not. We are concerned with the latter group which always tries to establish itself at the cost of its host and in the long run gets the upper hand over him. In short, these organisms are pathogenic to man and their pathogenicity depends much on the foothold which they establish in the environment. Thus, the importance of controlling the activity of the pathogenic organism is a bare necessity, and, if this is accomplished, much of the dreadful diseases would

be things of the past. But this could be achieved only by taking sanitary measures in a planned way and on a mass scale.

In India, 76 per cent of the people live in rural areas which are again most insanitary to live in. At intervals, epidemics sweep over vast tracts of land and thousands fall a victim to these epidemics while million others suffer every year in endemic regions from various ailments having direct bearing on the insalubrious environment. In India, around 50 million people suffer from gastro-intestinal diseases every year, of which, about 2 million die. Again the infant mortality rate is very high and it is one of the highest in the world. These two figures are very significant in judging the conditions of living environment in a country and an inference can very appropriately be drawn from them.

In rural India roughly 5 per cent of the population gets pure and wholesome water and only 3 to 4 per cent have some sort of sanitary system for disposal of human excreta. In the absence of potable water, people take water from any and every other available source and it is no wonder that huge majority of them are affected with gastro-intestinal diseases. Again, due to indiscriminate defecation the soil and water sources are polluted with pathogenic organisms. In fact, soil infestation may be so much that in places almost 80 per cent of rural people suffer from some sort of gastro-intestinal diseases.

In solving the problem of sanitation of rural areas, we have to think of the following services listed according to priorities:

- (i) Supply of pure and wholesome water;
- (ii) Provision for sanitary disposal of human excreta;
- (iii) Disposal of garbage and animal excreta, and
- (iv) Housing of proper type.

Pure and wholesome water is an essential requirement of any town. At present, their requirement is obtained through ponds, wells, etc., which are more often contaminated.

In such cases, wherever it is possible, we can divert natural spring water and make use of it. Tube wells can be considered for the places situated on plains and also for community

use as in market places, and melas.

There should be proper disposal of human excreta and people of the towns must be made to understand the importance of using sanitary latrines connected with underground system or septic tank.

The removal of slope water, rain water and other liquid filth is generally effected by surface drains in both municipal and non-municipal areas. Ordinarily these are inefficient, ill-kept and have no proper gradient, and during the rains, they become full of foul liquid which undergoes decomposition, and putrefaction gives an offensive smell. There should be proper construction and management of these drains.

1. They should be constructed with a proper gradient and made impervious with cement or glazed half channelled pipes.
2. They should be cleaned periodically and all weeds and plants removed.
3. They should not lead or open into any source of water supply.
4. Water should be disposed of by irrigation over agricultural lands and away from any human habitation.

The present trend is towards integration of all agencies for one common achievement. We can reduce the cost for environmental sanitation programme by integrating it with various other development schemes under community development programme.

'O' STANDS FOR ORIGIN OF THE SOLID WASTES

Solid waste means all non-liquid waste material arising from domestic, trade, commercial, industrial, agricultural and mining activities, and from the public services. They contain countless different materials like dust, foodwaste, paper, metals, plastics, glass, furnishings, garden waste, factory off cuts, pathological wastes, hazardous and radio active wastes.

In our country, on an average, solid waste generation is between 300 to 500 grams/person/day, and the density varies from 100 kgs per cu.m. to 600 kgs per cu.m.

The apt definition of solid waste is "matter in the wrong place" implying that the material becomes waste when the specific owner ceases to have a use for it. But the same could be useful elsewhere. So it could be called as a resource material for recycling, fertiliser or for energy and the balance for land reclamation. By improper handling of the solid wastes, there is always the possibility of potential risks to health and to the environment.

Solid waste management is one of the obligatory functions of any civic body and it is supposed to provide good environment conducive to healthy living for its citizens.

The solid waste management aspects are:

- (a) Refuse collection;
- (b) Storage and transportation; and
- (c) Disposal.

To have a proper organisation to manage solid wastes, it is very essential to know the quantity of solid wastes generated. The variation in quality and quantity are very large not only in different cities, but even in different parts of the same city. These are primarily dependent on the types of activities in any area and the economic status of the people living there.

'P' STANDS FOR PROPER STORAGE AND TRANSPORTATION

Storage

There are 4 types of basic storage system:

- (i) Communal storage which may require delivery of the wastes by the household over a considerable distance;
- (ii) Block collection, where the household delivers the wastes to the vehicle at the time of collection;
- (iii) Curb side collection—where the household puts out and later retrieves the bin; and
- (iv) door to door collection, where the collector enters the premises and the household is not involved in the collection process.

Street cleaning has to be done for many reasons, such as:

1. To prevent diseases, injury and annoyance from the street dirt;
2. To prevent vehicle damage from sharp, metallic objects;
3. To promote safety in reducing fires from dry leaves, and litter and slips and skids from wet leaves;
4. To enhance community appearance;
5. To prevent the clogging of sewers and storm drains; and
6. To reduce water pollution from street run off.

Street cleaning in our country is done mostly by manual power using either fan brooms or long handle brooms. Street sweepings are collected on the spot in the wheel barrows and carried on to the nearest dust-bin for temporary storing and in some cases small relay vehicles are used for collecting the sweepings from several streets, and taken over to a bigger collection centre where bigger transport vehicles can pick up the solid waste. This system is very useful in cases of small lanes and bye-lanes where the movement of bigger transport vehicles is not possible.

House to house, and shop to shop collection directly into the transport vehicle is being done in certain localities and commercial and business areas in the Bangalore City Corporation. With prior understanding of the households and shop owners, the transport vehicle goes to these areas on a mutually accepted timings and stops at every 50 feet and the vehicle driver gives horn or bells to draw the attention of the households, shop-owners to deposit their wastes directly into the vehicles.

This has the following advantages:

1. The roadside bins are taken away;
2. The footpath without these dust-bins are made really walkable and accidents free;
3. The nuisance from rag-pickers and rodents are solved;
4. It has provided healthy and motorable roads;
5. It has done away with the temporary collection and

collecting first in the dust-bin and later transferring them to transport vehicle; and

6. Lastly it has solved the indiscriminate throwing of shop wastes on the roads and footpaths, especially after the municipal workers have finished their sweeping work.

Transportation

The transportation of solid waste includes loading of garbage into the transport vehicle, transportation of garbage from the collection points to the disposal points, and unloading of garbage at the disposal sites. Transportation of solid waste can be done through the following vehicles.

1. Small trailers and tempos are used for shop to shop collections and also as relay vehicles to collect the garbage from small lanes and bye-lanes where bigger vehicles cannot go.
2. Big lorries, with or without tipper gear for transporting at the solid wastes the final disposal sites.
3. Tractor trailers can also be used for collection and transportation.
4. Introduction of container carrier system in places where there is heavy generation of solid waste such as big market areas and wholesale business areas.
5. Front-end loaders are also used for transferring of garbage from big collection sites into the transport vehicle.
6. Bulldozers are used to push and level the heaps in the low-lying areas.

'A' STANDS FOR ALTERNATE METHODS OF DISPOSAL

Disposal is very important aspect of solid waste management and needs very careful planning. This is normally the last operation of the solid wastes management. In fact, in the organisation of an integrated refuse handling systems, it has to be planned first, since it has an important influence on both storage and collection. Moreover, disposal has direct effect on the cleanliness and pollution of environment. Un-

fortunately, disposal of refuse in a scientific and hygienic way has not so far been given due importance.

Due to heterogeneity of the city refuse, no one method of disposal serves the purpose adequately and satisfactorily. Hence several methods have to be used depending upon the nature of the constituents of solid waste. The solid waste of many cities has a major portion which can be fermentable and the remaining non-fermentable is good for land reclamation by sanitary land fill, if re-cycling is not possible,

These are the following methods of disposal:

- (a) Incineration,
- (b) Sanitary land fill,
- (c) Composting, and
- (d) Resource recovery.

Incineration

Incineration provides a means of disposing of refuse by high temperature-oxidation. Incineration method is expensive besides being wasteful. It is also likely to result in air pollution if adequate precautions are not taken. In India, this method is recommended for disposal of hospital and clinic wastes only. Design of incinerator requires expert knowledge in this field or else it will cause a lot of air pollution.

Sanitary Land Fill to Replace Open Dump

Open dump is a land disposal site where solid wastes are deposited with no regard to public health, pollution consequences or aesthetics. They are called open dump since the wastes are not covered. This method has been resorted to in most of the places in India because it is cheap and needs no planning. Generally, the low lying areas and outskirts of the town and cities are used for this purpose. They are always a menace to the health of the residents of the nearby areas. These dumps become a source of objectionable smoke and odours and serve as breeding grounds for flies and mosquitoes and contaminate both the surface and ground waters. Although this method is cheap, the amount of health hazard is tremendous. To prevent health hazard, this type of open dumping needs to be replaced by sanitary land fills. This requires site selection for a sanitary land fill. In addition to

the technical, engineering competence, attention to the economic, social and political aspects of the land-use planning has also to be given. The practicability of location should also be considered. The local or regional master-plan, present and future zoning of adjacent land should also be kept in view. For example, the proximity of present or future airports is a matter of concern since birds may be attracted to an operating land fill and thus may endanger low-flying aircraft.

The climatic characteristics, such as prevailing winds, precipitation, evapo-transpiration, and temperature variations as they relate to odours, dust, leach generation, blowing litter, erosion, etc., should also be considered. Many land fill operations can serve the purpose of reclaiming waste lands otherwise unsuitable for other purposes including human use.

Proper arrangements should be made for site improvement by providing the following:

- (i) proper roadway leading into the gate-house;
- (ii) permanent or portable chainlink fences for protecting the site and catching windblown papers;
- (iii) an attractive entrance area with a lockable gate, and appropriate sign board;
- (iv) drainage ditches to divert surface water; and
- (v) appropriate sanitary facilities for the employees.

Progress Plan: A series of plans should be engineered for the phased land filling programme, such as: (i) a base map showing the original topography and initial site improvement; (ii) several interim plans depicting improvements at various construction stages; and (iii) a final plan illustrating the ultimate contours. Insofar as the land filling methods are concerned, they are of two basic types:

1. The area fill and its modifications, and
2. The trench fill and its modifications.

The trench fill is common in flat or rolling areas. The solid waste is placed in excavated trenches and the excavated earth is used for soil cover.

Area method is common in ravines, canyons, open pits of

similarly concave areas. Soil cover is obtained by cutting down the fill wall areas. The solid waste is confined by equipment compaction or solid wastes and cover solid wastes and cover soil admixture.

No solid waste should be left exposed for over 12 hours. A minimum thickness of 1 foot of compacted soil cover should normally be placed in areas which will not be used again for more than 30 days. A minimum of 2 feet of final compacted cones should normally be placed immediately on completed areas. Indiscriminate salvaging and storage of solid wastes should not be allowed at the land fill site, primarily due to considerations of health, safety and aesthetics. It is estimated that for a 6 feet deep refuse, one acre of land per year will be required per 15,000 population.

Composting

It is a self paying proposition. Composting is a biological process for converting organic solid wastes into a stable, human like product whose chief use is a soil conditioner. Composing is biological decomposition of the organic constituents of under controlled conditions.

Classification: Compost system can be classified on the basis of three general usage, namely:

1. Oxygen Usage

- (a) aerobic
- (b) anaerobic

2. Temperature Usage

- (a) mesophyllic (mesophyllic bacteria work in the temperature range of 15 to 25°C)
- (b) Thermophyllic—(Thermophyllic bacteria work in the range of 45-65°C)

3. Technology as the key

- (a) open or windrow—a long low heap of manure,
- (b) enclosed or mechanical.

Aerobic Composting: It involves the activity of aerobic microbes and hence the provision of oxygen during composting. It is characterised by high temperature, absence of foul odour and it is more rapid than anaerobic composting. Its advantage over anaerobic is that it is more rapid and permits high temperature free from odours.

Anaerobic Composting: It involves no provision of oxygen during composting process. It is characterised by low temperature (unless heat is applied from the external source). The production of odorous intermediate (reduced) products generally proceeds at a slower rate than that of aerobic composting. The main advantage of anaerobic composting is that the process can be carried on with a minimum of attention and as such, it can be sealed from the environment.

Mesophillic Composting: As the term implies, mesophillic composting uses intermediate temperatures (15 to 25°C) which in most cases is the ambient temperature.

Thermophillic Composting: It is conducted at temperature from 5°C to 65°C.

In practice, most of the processes include generally two types of ranges.

Open or Windrow: In this process, the entire process is carried out in the open. The material is usually stocked in elongated windrows.

Enclosed or Mechanical System: Here the greater part of the initial composting activity takes place in an enclosed unit the digester.

Most mechanical processes involve windrowing towards the end of the process to allow the composting material to 'mature'. Therefore, composting is subject to well defined biological limitations:

- (a) a suitable microbial population must be present;
- (b) the rate and efficiency of the process are the functions of the rate and efficiency of microbial activity;
- (c) the capacity of a given operation is limited by the size and nature of the microbial population;
- (d) the substrate subject to composting generally must be organic, and
- (e) environmental factors are of key importance.

Not only must a microbial population be present, it must also be one that is suited to the task.

Advantages of Composting

1. All types of wastes like garbage, night soil, slaughter house waste and sullage can be disposed by a common method at the same spot and on the same day.

2. It is hygienic and sanitary method. The high temperature (above 60°) which develops in the compost mass in a day or two and persists for some weeks, serves effectively to destroy small pathogenic organisms, fly larvae, weed seeds and obnoxious constituents present originally in the city wastes.

3. The proportion of dry refuse to the liquid portion (night soil or sullage) is so adjusted that the compost mass is solid enough to permit walking over it even on the first day of the trench filling.

4. There will be complete control over small and fly nuisance and as such composting can be taken up at a few furlongs from the town.

5. It helps the agriculturists to revive and augment the soil fertility in cyclical way.

6. It can also prove to be a profitable venture. Composting can be by Indore process or Bangalore process.

Indore Process

The basic structure used in this process is a shallow open masonry pit, 2 to 3 feet deep, 10 to 12 feet wide and about 100 feet long. Night soil and mixed refuse from street and houses are placed in the pit in alternate layers, each about 3 inches thick to a depth up to 5 feet. This material is placed along the length of the pit only on half width to permit subsequent turning. Daily loadings in the pit are marked. When the pit is filled along its entire length, another pit is used. The material is turned in the pit every 2 weeks for a period of 8 weeks, then stored on the ground besides the pit for another month without turning.

Fly problem is effectively controlled by a single application of 2½ per cent solution of benzene hydrochloride containing 6¼ per cent gammaisomer in the technical grade material.

Thereafter the composting action itself takes care of fly problem.

Here the composting action is mixed aerobic and anaerobic with aerobic action predominating following each turning. There will be 6 complete handlings of the compost by manual labour from the time of placement in the final removal.

Bangalore Process

This is modified method adopted in the light of experiences gained by the Bangalore city administration. This is now widely adopted by municipal authorities throughout the country.

In this process of composting a series of earth trenches each 30 feet long, 4 feet wide and 4 feet deep are made. Fresh material is placed in layers as in the Indore process to a height of about 18 inches above the ground level. Care is taken to see that the first and the last layer will not be from the night soil and then eventually covered with a 6 inch layer of earth.

The material is not turned, but is digested under anaerobic conditions and is complete in 4-5 months. Fly control is achieved by earth cover and also by the heat of decomposition. In this process only 2 handlings are involved. The compost made through this method is free from pathogen and contains 1.5 per cent nitrogen, 1.1 per cent potash on dry basis and proves a valuable nutrient to the soil.

Resource Recovery

There are 3 forms of resource recovery:

1. material conversion,
2. material re-cycling, and
3. energy-recovery.

Material Conversion: In this form of resource recovery certain wastes are recovered and put to uses which may be very different from that of the original material.

Example: (a) making compost out of mixed biological materials,

- (b) using waste glasses and rubber tyres in high way paving, and
- (c) using fly-ash to make constructions blocks

Material Recycling: Recycling means bringing a waste material back into the process by which it is formed.

- Example:
- (a) Using waste paper to make new paper,
 - (b) Using thrown away bottles to make new bottles, and
 - (c) Using scrap steel to make new steel.

Energy recovery: Here the energy is recovered as heat. The heat is obtained by burning solid wastes in different ways:

- (a) solid waste is burnt together with a fossil fuel in power plants through electricity, and
- (b) By making the solid wastes to undergo pyrolysis.

Concluding this section of solid wastes disposal, I am reminded of an incident, which I would like to quote. A lawyer telegrammed his client, stating "Regret to inform that your mother-in-law has died, shall we bury, cremate, or embalm her"?

A prompt reply was despatched "Bury, cremate, or embalm her; take no chances." Likewise, I suggest, we should take no chances with solid wastes. So take all methods of disposal since no one method is fool proof and 100 per cent guaranteed.

Incinerate the hospital waste
Compost the fermentables
Re-cycle the re-usable materials, and
Land fill with the remaining residuals unusable.

Perspective of Public Relation in Environmental Sanitation

The purpose of public participation in environmental sanitation is two fold:

1. an opportunity is created for managers to inform and

instruct the public;

2. a channel of communication is opened that allows the public to communicate its needs and desires to managers. The opportunity for two-way communication is of great importance, for the activities, goals, and means of environmental sanitation which presently is not well properly understood by the public.

There are numerous ways to convey the ideas and concepts concerning a technical system to a non-technical community. The most successful communication channels are developed by using simple terms and objective-oriented graphics in written materials (plans, information booklets, etc.) and an open-door policy for the input of new ideas to management.

Environmental sanitation work is a dedicated work. We should understand the community we serve, their values, aspirations, and needs. This can be achieved only by our repeated friendly visits to them. We should gain their confidence. This confidence can only be gained when we have sold the idea that we are really eager to help them. This should not stop at speeches and assurances, but must be proved with our action. We should always try and focus the benefits that the public is going to get by detailing the advantages to both people and community as a whole. It is only the good understanding between the management and the public which can yield the desired result. This public relation is like a wick in an oil lamp that helps to burn the oil to give brightness.

'L' STANDS FOR LASTLY—CONCLUSION

In the solid waste management, unless there is a whole-hearted participation and support of every citizen who realises his social responsibilities, effective solution cannot be found to tackle the solid waste management problems.

The importance of proper educational programmes and public campaigns for keeping the cities clean, and bold legislation and effective implementation of this legislation needs no emphasis. Effectiveness and satisfactory functioning of

any public authority depends on 5 factors:

1. Support of law,
2. Sound structure,
3. Organisational and technical capability including equipments and machinery,
4. Adequate finance, and
5. Public cooperation.

Unless and until all the above factors are given full consideration by the government, municipalities and general public, we can never hope to get the best of benefits.

So our determination should be that:

If it is bad—make it good

If it is good—make it better

If it is better—make it best, and

If we can better the best—Let us not take *rest*.

I would like to end this write-up by stating that I have initiated this subject by using the alphabets of my name—GOPAL, and now to conclude, I would like to re-use the same letters—GOPAL—meaning differently:

G—Go

O—Organise

P—Plan

A—Act

for

L—Lasting result

BIBLIOGRAPHY

1. David Gordan Wilson, "Handbook of Solid Waste Management".
2. B.N. Ghosh, "Hygiene and Public Health".
3. Solid Waste Management—Vth Course, IIPA.
4. *Report of Committee on Urban Wastes*—Part I.
5. TECHO BANOCLOUS / THEISEN / ELIASSEN, "Solid-Wastes".
6. Frank Flintoff, "Management of Solid Wastes in Development Countries", WHO Publication.

MANAGEMENT OF SOLID WASTES IN SMALL AND MEDIUM TOWNS

G.S. OBEROI

All kinds of wastes in solid state emanating from public services, residential, commercial, industrial, and institutional activities are known as solid wastes. The dangers from incorrect handling of solid wastes are manifold. The main risk to the health of general public arises from the breeding of flies and rodents due to improper storage and disposal of solid wastes. Scattered solid waste pollutes the environment and destroys the beauty of country side. Serious risks are also involved in solid wastes being spilled over while transporting and improper handling of hospital wastes. Leachate from refuse dump pollutes surface and ground water. It is, therefore, a right time that due importance is given to the solid waste management in the planning and development process of small and medium towns.

Integrated development programme sponsored by the Government of India provides an excellent opportunity to understand this important aspect of urban development. A sizable portion of the civic budget (10 to 15 per cent) of small and medium towns is being spent at present on solid wastes management (SWM). Even after spending such an amount of the budget on the SWM, the results are far from being satisfactory. Proper collection booths are missing, transport arrangements are highly inadequate, practically no thought is being given to the scientific disposal and management of solid wastes.

The need for inclusion of this subject in the integrated development programme is further highlighted due to the fact that, at present, only bigger cities and corporations have the

capacity to handle the functional elements of the SWM in an organised, scientific manner. The corporations have the services of senior public health engineer and mechanical engineer of the rank of Chief Engineer to direct their organisation. In small and medium towns, it is left to the secretary of the municipality to plan and manage the whole department. The Public Health Engineering Department (PH) in the state is also not involved in the technical and operational guidance.

The integrated development project reports prepared by Environmental Research, Planning & Design Organisation (ERPDO) of the Punjab State contain an independent chapter on solid waste management (Garbage Removal and Its Disposal).

There is a wide range of individual activities of SWM which are required to be dealt with effectively. The combination of functional activities are known as solid waste management system. It mainly consists of the following:

- (i) Determining the composition of refuse from various localities;
- (ii) Storage (houses, offices, commercial buildings and localities); and
- (iii) Collection of refuse:
 - Street cleansing
 - House to house collection
 - Kerb side collection
 - Block to block or standing vehicle collection
 - Dump to dump collection;
- (iv) Location of collection dumps;
- (v) Transportation, types and frequency;
- (vi) Labour norms, health of labour and labour relation; and
- (vii) Pre-treatments, disposal, and recycling of solid wastes.

The relationship among above functional elements must be recognised, understood and evaluated. The system proposed shall be the best possible system subject to constraints imposed by its users in each small town or a city and by those who control it. Mere copying of the experience of larger municipal corporations will not help improve the system so far as small and medium towns are concerned. The functional elements of SWM in small and medium towns have

nomenclatural similarity with the functional elements of SWM of a larger city, but their related problems and solutions differ considerably.

COMPOSITION OF SOLID WASTES

The composition and proportion of solid wastes reflect the diversity of man's action. The characterisation of wastes is usually associated with the origin and sources of wastes generation such as:

- (a) *Domestic source*: Waste products of house keeping and food, sweeping, fuel residues, empty containers and packages, broken glass and crockery ware, vegetable material, etc.
- (b) *Commercial source*: Solid wastes of retail distribution, packaging material, other refuse such as paper, food wastes, etc.
- (c) *Institutional source*: This type of refuse refers to the sources such as hospital, grain markets, vegetable and fruit markets, schools, barracks, etc.
- (d) *Municipal sources*: This refuse comes from street cleaning faecal matter, leaves, trees, landscaping, park operations, grit from gulleys, reconstruction material waste, etc.
- (e) *Industrial sources*: Industrial wastes include building construction waste, factory waste, trade waste, waste from mineral extraction, etc. Normally, in case of small and medium industry, the solid waste is disposed by the factories themselves. The trade waste such as automobile workshops, hair dressing, saloons, tailoring establishments, residue from small furnaces, foundry sand, rubber tyres, etc., find its way to municipal collection system.
- (f) *Agricultural and Animal Husbandry Source*: These wastes include poultry waste, dung, urine, forage, straw husk, etc.

Detailed survey of the small and medium towns of Moga and Khanna and two medium size municipal corporations,

i.e., Ludhiana and Jullundur undertaken by ERPDO reveal some of the important characteristics and composition of solid wastes (Tables 1A-E).

TABLE 1(A) PHYSICAL CHARACTERISTICS OF REFUSE FROM A CITY DUMP

S. No.	Constituents	Average Weight in kgs. in a Sample of 100 kgs.			
		Ludhiana	Khanna	Jullundur	Moga
1.	Vegetable matter	38.50	52.00	50.2	37.0
2.	Night Soil	7.50	21.00	1.7	30.0
3.	Paper	1.40	1.5	2.4	1.0
4.	Rags	2.70	1.5	0.8	1.0
5.	Leather, Plastic and Rubber	1.30	1.0	0.3	1.0
6.	Glass	0.50	—	0.1	0.5
7.	Bones	—	—	0.2	—
8.	Wood	0.30	—	—	—
9.	Metal	0.10	—	—	0.5
10.	Brick Bats, Kanker and China clay	5.30	4.0	6.9	4.0
11.	Earth and Ash	42.40	19.0	37.4	25.0
TOTAL		100.00	100.00	100.00	100.00

TABLE 1(B) STAFF AND EQUIPMENT/1000 PERSONS

S. No.	Staff/Equipment	As per Norms	Available			
			Ludhi- ana	Khanna	Jullundur	Moga
1.	Sweepers	2.5	2.52	4.00	2.96	3.28
2.	Sanitary Super- visor/Jamadar	1 for 15 Sweepers	1 for 36	1 for 22	1 for 38	1 for 27
3.	Sanitary Inspectors	1 for 50 Sweepers	1 for 90	1 for 102	1 for 133	1 for 100
4.	Wheel Barrows (hand carts)	2.5	1.16	1.96	1.23	3.70
S. No.	Description	Ludhiana	Khanna	Jullundur	Moga	
1.	No. of Sweeper per sq. km. of Munici- pal Area	36.71	48.80	35.91	42.90	
2.	No. of sweepers per hand cart	2.19	2.04	2.40	0.89	

TABLE 1(C) TOTAL TONNAGE OF REFUSE
REMOVED DAILY

S. No.	Name of the Town/City	Population (1981) (Rs. in lacs)	Quantity of Refuse removed daily in (tons)	Average/per capita in kgs.
1.	Ludhiana	6.06	309	0.51
2.	Khanna	0.51	36	0.70
3.	Jullundur	4.06	200	0.49
4.	Moga	0.81	48	0.59

TABLE 1(D) TRANSPORT CAPACITY AVAILABLE WORKING
ONE SHIFT PER DAY

S. No.	Type of vehicle (capacity in tons)	Ludhiana		Khanna		Jullundur		Moga	
		Nos.	Capacity	Nos.	Capacity	Nos.	Capacity	Nos.	Capacity
1.	Trucks (ST) (5 T)	5	75	—	—	—	—	1	15
2.	Tipper (7 T)	2	42	—	—	5	105	1	—
3.	Tractors (2 T)	—	—	3	18	—	—	—	—
4.	Tractors (3 T)	13	117	2	18	5	45	3	27
5.	Container Carriers (5 T)	5	75	—	—	2	30	—	—
6.	Matador (2 T)	—	—	—	—	—	—	1	6
7.	Donkeys (1/8 T)	—	—	—	—	80	20	—	—
TOTAL		309 Tons		36 Tons		200 Tons		48 Tons	

TABLE 1(E) PERCENTAGE OF BUDGET OF SOLID WASTE
MANAGEMENT TO TOTAL BUDGET OF MUNICIPAL
COMMITTEE/CORPORATION

Description	Ludhiana	Khanna	Jullundur	Moga
Percentage of Budget for SWM	11.04	11.09	10.76	16.67
To Total Budget of M.C.				

Khanna is a sub-divisional headquarter having small number of offices, normally located in private buildings. The town has fairly large amount of small and medium industries inside and adjacent to municipal limits. It has a very big grain market. Moga is also a sub-divisional headquarter but has no small or medium industries, except one. The town economy is mostly based on commercial and agricultural activities.

Ludhiana is a predominant industrial city and also a district headquarter. Jullundur is a district headquarter and has a large number of educational institutions. The city has also small and medium industrial units to some extent.

The composition of solid wastes and its physical characteristics given in Table 1 reveal that there is a distinct similarity in the quality and quantity of various elements of solid wastes generated in small and medium towns with the wastes generated in larger cities.

The predominant difference marked is the presence of large percentage of night soil in the samples of wastes from small and medium towns. This distinct feature of the solid wastes of small and medium towns requires special attention for its storage, collection, transportation and disposal.

STORAGE

Solid wastes not being a flowing material has to be stored before it is collected in the process of being transported to disposal point. This temporary storage may be for a few hours or a few days depending upon: (i) quantity, (ii) capacity available, and (iii) availability of transport facilities, *i.e.*, one shift, two shifts or three shifts day, etc.

Some places of high activities, such as large vegetable and fruit markets or big slaughter houses or hospitals may generate such quantities that it may become difficult to hold for full 24 hrs. cycle. Similarly, sometimes, though generation may not be that large, but the locality is so crowded with commercial activities that it becomes difficult to arrange land for construction of a collection and storage dump. Such difficulties are normally encountered in case of small and medium towns but their magnitudes are not of staggering proportions.

The type of storage arrangement in houses, commercial

buildings and offices should, however, be: (a) hygienic, (b) of enough capacity, (c) weather resistant, (d) having portability, and (e) accessibility to collection.

CONTAINERS

The common type of containers recommended for household use are:

- (i) Metallic or liquid plastic tapered cylindrical bins with a capacity of 15 litres or more fitted with detachable lid.
- (ii) Disposal high wet strength paper bags from 30 to 100 litres which are suspended from stands having hinged lids.
- (iii) Disposable plastic bags.

The IDSMT project report envisages either: (a) amendment in bye-laws making it compulsory for the households to have suitable storage facility and/or (b) should provide at subsidized rates metallic dust bins or disposable plastic bags. The proposed scheme, however, shall take into account the practical aspects of its likely misuse, *i.e.*, subsidised bins could possibly be utilised for storing grains, etc.

Small holes on the side walls of the bin will definitely deter the householder from misusing it. Scientists have also developed a design of standardised receptacles which may be considered for adoption in the management of solid wastes in the integrated development of the small towns. Another suggestion can be that such a benefit of subsidised bins could be restricted to EWS, *i.e.*, that section of population having an income of Rs. 8,000 per annum and below.

For shopping areas, large size bins which could be easily unloaded into hand trolleys could be provided. A very simple and exceptionally economical design suggested for such areas is given in Annexure A.

Normally 20 to 50 litres empty drums are available with all civic bodies which can be used free of cost. The manufacturing cost of such dust bins if manufactured in municipal workshop is in the range of Rs. 25-30. The fixing cost at site may be about Rs. 20.

In case of vegetable and fruit markets, where large quantity of refuse is expected, metallic containers of 1.2 m³ capacity usually mounted on wheels are useful. If still a larger quantity of refuse is expected, then metallic containers of 4 m³ capacity with openable roof may be placed at strategic points.

COLLECTION

Domestic refuse constitutes the bulk of urban wastes in small and medium towns. Markets and slaughter houses are the major sources of non-residential wastes. For efficient planning and operation of collection arrangements, the following information has to be collected:

- (i) Type of storage arrangement of householders;
- (ii) Manner of carrying domestic refuse to collecting sites;
- (iii) Conditions and location of collection and disposal sites;
- (iv) Arrangements for the collection of night soil in case the town is unsewered; and
- (v) The problem of environmental sanitation and health hazards involved in the process of collection and subsequent removal to disposal sites.

The management problem of collection also requires investigation of the following factors:

- (i) Identifying the existence of strong community having its own policies;
- (ii) Financial constraints;
- (iii) Insufficient data regarding the quantity, quality of equipments or collection site locations; and
- (iv) Labour problems.

The methodology adopted in obtaining information shall be decided in advance for collecting various information.

FREQUENCY OF REFUSE COLLECTION FROM HOUSEHOLDS

On account of hot climatic conditions prevailing in our country, organic matter decomposes very fast. Therefore,

provision should be made for removing household refuse daily. But house to house collection is not feasible in old localities of small towns. The streets are narrow and residents are too conservative to accept such a change easily. However, if residential land development scheme of 50 acres and above is proposed then a pilot project should be envisaged for the new locality. In this system, the refuse will not be brought by residents, and the garbage van crew will collect the garbage from containers placed outside the house compound premises. The new land development scheme can achieve success as there is no nightsoil involved and houses are accessible by roads. Land for collection of dumps should be earmarked in the land-use of Master Plan. In the old localities of small and medium towns, 'dump to dump' collection has been found to be more practicable. Garbage is deposited by private sweepers who clean the private premises and municipal sweepers who clean the streets at an appointed place. Such community collection points should be:

- (i) Located at convenient places so as to minimise nuisance and pollution to environment and also reduce long walking distance for the private/municipal sweepers (preferably not more than 1/4 km); and
- (ii) the design of collection dump should be such that sweepers can easily unload the garbage from their wheel barrows. The inside of the dump should be finished with hard, water proof material preferably 6" x 6" glazed tiles. The arrangement for washing and drainage should be made available in each collection dump. A clean collection dump will contribute to the improvement in environment.

In the programme of solid waste collection, a sufficient number of wheel barrows should be made available to municipal sweepers. In case of private sweepers, the municipal council should subsidise the cost of wheel barrows so that even the private sweepers could work in most hygienic and humane conditions. The IDSMT report envisages procurement of additional wheel barrows in a phased manner. The design of wheel barrows should be such that it is neither

heavy to pick up nor difficult to unload at the collection dump. A typical design adopted by ERPDO, Punjab is given in Annexure B. At present, the practice of carrying nightsoil as head load persists in many localities which degrades human dignity and should be eliminated as early as possible. To make the programme effective, the sweepers also have to be educated and orientated for making use of the wheel barrows, who by sheer force of long habits are sometimes disinclined to make use of it.

The prevalent practice of night soil collection will continue to be practised for quite sometime in most of the urban towns and cities till alternate arrangements are made. Its proper collection and disposal can contribute, to a great extent, towards the cleanliness of the towns.

In small towns, as discussed earlier, the ratio of nightsoil to other types of refuse is very high. The method of dumping nightsoil alongwith the refuse is very insanitary. The integrated development programme should have given adequate emphasis on the collection and disposal of nightsoil separately. The existing municipal bye-laws should be amended to ban the construction of all new dry latrines where sewerage lines have been laid and making it obligatory for the users of existing buildings to get the flush latrines installed. The capital cost of providing sewerage system varies from Rs. 150 to 200 per capita. The maintenance cost of sewerage system varies from Rs. 10 to Rs. 15 per capita per annum. In view of such a high capital cost, the choice is between providing a well organised sanitary nightsoil removal system at a relatively higher operational cost or to pay substantial amount by way of interest (Rs. 60 per family per annum) on the capital cost of introducing sewerage system. The alternative system is strictly economical, but from the view point of health and environmental cleanliness, sewerage is much superior a system.

Till sewerage facilities are available in the small and medium towns, some other simpler system could be considered. Registered private sweepers may be provided with wheel barrows free of cost which may be extensively used for collecting nightsoil from the households, they are serving. The municipal container or standing truck should be parked

for a few hours (between 8 A.M. to 11 A.M.) each day on such places conveniently approachable by wheel barrows.

The collection of street sweeping and market refuse can be planned comparatively more easily. With appropriate location of dump points and the frequency of refuse removal have to be ensured to keep the collection dump clean. The refuse free from nightsoil as such could be stored for 24 hours or less according to quantities of refuse accumulated in the market.

BLOCK TO BLOCK COLLECTION

In this system a garbage van travels on regular route at prescribed intervals and stops at predetermined points where households and street sweepers bring their garbage cans or buckets for emptying into the vehicle. It is also known as standing lorry system. The arrival of lorry is indicated by ringing bell or by other suitable means. It is a cleaner system provided it is maintained regularly but it requires public cooperation. It eliminates street dumps and provides for economical method of collection as smaller motor loading crew is required to lift a load of about 7 tonnes in a shift of 7 hours. Such a system can also be recommended for small and medium towns for selected market areas or posh localities.

KERB SIDE COLLECTION

In this system, garbage cans are left outside the premises on the road kerbs, or the day garbage van is to collect. The cans are emptied in the garbage van. The system can also be adopted in newly residential developed areas.

LABOUR FOR COLLECTION

The recommended labour norms required for the collection of refuse is 2.5 to 3 manual workers per 1000 persons. A group of 50 workers is controlled by a Sanitary Inspector and five such inspectors are controlled by the Chief Sanitary Inspector. Safety measures and protection against risks of

accidents and ill health has to be made by providing protective clothings.

TRANSPORTATION

Depending upon the quantity of solid wastes generated and distance to be covered, various methods of transportation can be used. Some of these are carrying on animal's back or carts driven by animals, auto vehicles tipping or non-tipping type, pedal tricycles, auto scooters, etc.

While deciding the type of transport, it has to be borne in mind that due to meagre resources of civic authorities of small and medium towns, sophisticated and costly equipments howsoever efficient, can not be suggested. Indeed in a town or city, no one mode of transport can prove effective, economical and efficient. It has to be a combination of one or two alternatives. The selection of alternative transport will necessitate the consideration of the following: (a) layout and condition of road; (b) methods of storage of refuse; (c) method of collection; (d) frequency of collection; (e) pay load per collection; (f) number of sites and their distances from the various collection points; (g) number of shifts and duration of shift; (h) number of trips per vehicle; (i) methods of loading and unloading, *i.e.*, manual or mechanical; and (j) requirements from the point of view of hygienic and aesthetic demand of the citizens.

The vehicle design should have the following objectives:

- load should be covered;
- loading height should be convenient for loading; and
- tyres of manual or animal driven carts should be pneumatic with ball or roller bearings and brakes.

For small towns, trucks with tipping arrangements may be too costly to afford and maintain. Similarly, container carrier system may not be within the reach of many small municipal committee's budgets. Three wheeler (a design adopted by ERPDO given in Annexure B) is the most suitable auto vehicle for small and medium towns, which can be easily provided with tipping arrangement. It has the distinct

advantages of: (i) $\frac{1}{2}$ ton carrying capacity, (ii) very low capital investment, (iii) low operation cost, (iv) smaller loading team—two sweepers, and (v) being a small vehicle, it can easily approach most of the localities and pass through small lanes/streets.

Animal driven vehicles will continue to be employed for quite some time but integrated development projects should envisage phasing out the same in about next five years. The project reports should estimate the cost of additional vehicles required for the refuse generated and transported every day. It is common problem with almost all the civic authorities that they are short of transport facilities at present.

Some of the municipal authorities have tractors and trolleys and have successfully deployed them. Its design for agricultural use could be conveniently used on the poor roads of small towns. But its capital cost is, however, more than the three wheelers. The facility of tractor trolley can be used as containers to facilitate carrying of nightsoil separately from the other refuse. While selecting and processing the types of vehicles, the civic authorities should bear in mind the requirements of a large inventories of spare parts for proper maintenance of vehicles deployed for transporting solid wastes. It will depend upon a rational choice.

LABOUR STRENGTH FOR TRANSPORTATION OF GARBAGE

About 4 to 6 persons may be required for loading a commercial vehicle. For 3 wheeler type vans, 2 persons may be sufficient for loading and only one person for unloading, if tipping arrangement is provided. Sitting arrangement for one person can be easily made alongwith driver's seat. The second person for help during loading can be obtained from dump site staff who may not travel with the van. For animal driven carts, one to two persons are, however, sufficient.

For every situation there is an optimum crew size which requires the lowest total cost. The factors that determine the crew size and cost are:

- (a) physical layout of the areas and distance to be covered for the various elements;

- (b) system of collection used, *i.e.*, door to door, etc., and
- (c) loading/unloading condition and travel time for routes and dumping grounds selected.

PRE-TREATMENT, DISPOSAL AND RECYCLING

Pretreatment such as 'mechanical volume reduction', 'chemical volume reduction', 'mechanical size reduction', 'component separation' and 'drying and dewatering' are some of the pretreatment methods which can be used after collection and before final disposal of solid wastes. All these methods are, however, highly capital intensive and can be viable only in the case of big cities where the amount of refuse generated is fairly heavy.

DISPOSAL

The method of open dumping done haphazardly creates risks of fire and nuisance of rats and insects leading to environmental disruption. Scientific methods have, therefore, been gradually developed for carrying out the final disposal.

These are:

- (a) sanitary land fill,
- (b) incineration,
- (c) composting—mechanical and non-mechanical, and
- (d) pyrolysis.

Incineration, mechanical composting and pyrolysis are highly capital intensive methods of disposal. Even semi-mechanical methods installed by large corporations are not viable. These methods, however, can only be proposed where wastes generation is 100 to 500 tons per day.

NON-MECHANICAL COMPOSTING

For small and medium towns, non-mechanical methods of composting can be proposed. In these methods readily compostable materials, such as nightsoil, animal waste, sewage-sludge, garbage, straws, leaves, municipal refuse and other

types of stable wastes are kept in alternate layers on ground or in specially constructed pits and then turned regularly for a period of 8 to 12 weeks, stirred on ground for a further period of 4/6 weeks. After about 5-8 timings and a total period of 4 months, the compost is ready for use.

FLY CONTROL

One of the most important problem in composting is the control of flies. Control of flies coming along with the refuse is achieved by spraying 'Baygon' bates (insecticides) on specially built tents. Adult flies are instantaneously killed while coming in touch with the insecticides.

SANITARY LANDFILL

Most suitable system of solid waste disposal for small and medium towns is sanitary landfill. The essential elements of this method are:

- (a) The site chosen is one which should benefit from its level raising;
- (b) The ultimate use of site is decided in advance so that the position of road, landscaping and nature of the coming material will accord with the proposed use; and
- (c) The refuse is deposited in layers not exceeding 2 m in depth and all surfaces of fresh refuse are covered with soil or similar material soon after depositing the same day.

Excavators may be deployed for overturning and excavating.

The selection of sites for controlled tipping and dumping should be undertaken in consultation with the water supply authority and geological advice should also be sought.

While preparing Master Plan, location of sites for garbage disposal should be identified and earmarked keeping in view the wind direction, etc. Otherwise, it becomes very difficult afterwards to arrange land sites for wastes disposal much to the displeasure of the residents of the locality.

RECYCLING OF REFUSE

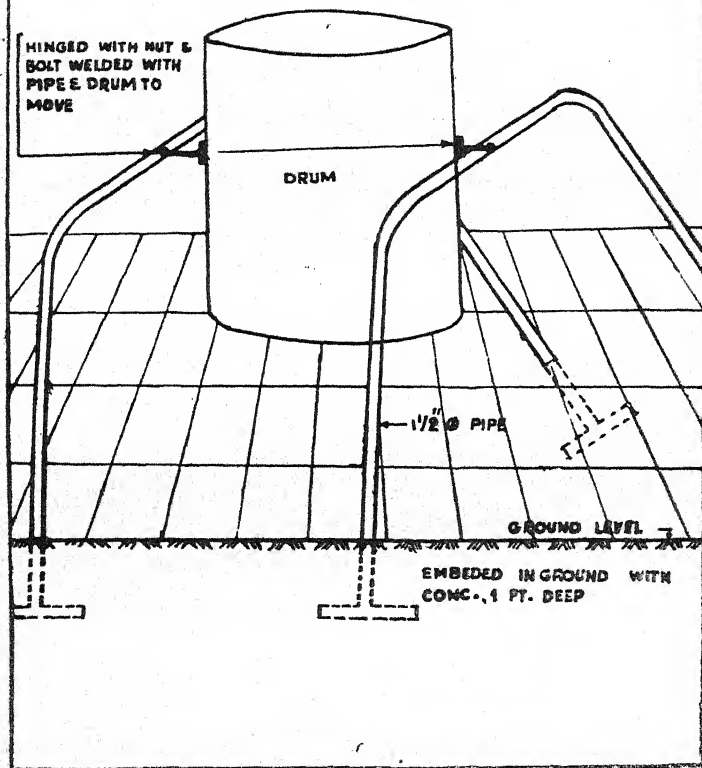
Papers, textiles, metals, broken glass pieces can be retrieved and recycled. Due to picking of garbage at collection as well as disposal points, the recycling is not an economical proposition. Therefore, it can not be recommended considering the financial and economic health of our municipal authorities.

Concluding the discussion, it is suggested that a 'chapter' on 'solid waste management' should form an important aspect of integrated development report of small and medium towns. The Government of India, Ministry of Works and Housing may like to incorporate this aspect in the guidelines issued earlier and to make it obligatory for releasing central loan assistance for integrated development programme. For the purchase of equipments for composting and transportation of solid wastes for better disposal and management of environmental sanitation, central assistance should be provided under the integrated development programme for small and medium towns. □

ANNEX- A

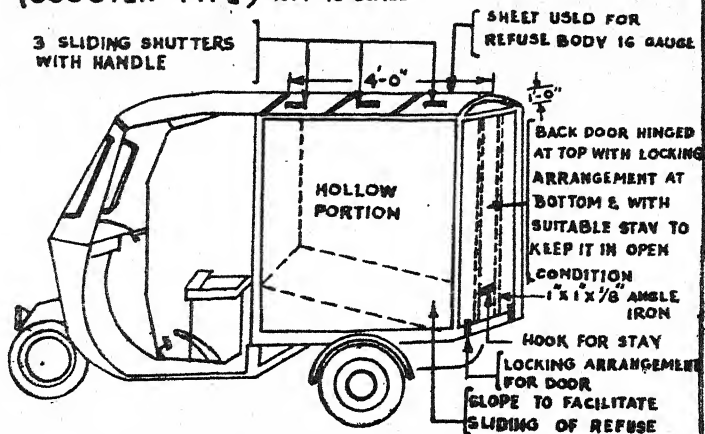
SKETCH OF TWENTY TO FIFTY LITERS
CAPACITY DUST BIN

NOT TO SCALE



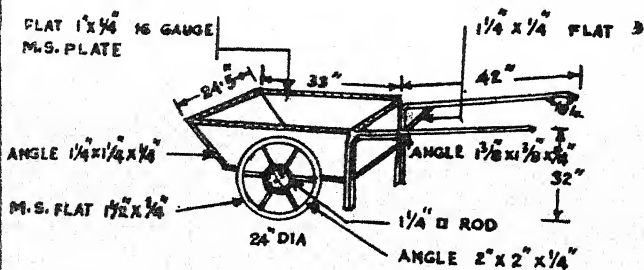
ANNEX-B

REFUSE COLLECTING VAN HALF TON CAPACITY
(SCOOTER TYPE) NOT TO SCALE



WHEEL BARROW OPEN TYPE

NOT TO SCALE



OPERATIONAL MECHANISM OF ENVIRONMENTAL SANITATION AND SOLID WASTES MANAGEMENT: PLANNING IMPLICATIONS AND PUBLIC RELATIONS

D.N. KHURANA

One of the major problems of environmental sanitation in urban areas is the management of solid wastes which is generated due to activities of an individual and consists of ashes, house sweepings, kitchen wastes, vegetable wastes, rotten fruits, road sweeping, cinder, piece of wood, iron, glass, china-ware, paper, plastic, rags, etc. In developed countries even furniture, TV, fridge and the like also form part of solid wastes. Quantum and type of solid wastes depend on economic position and standards of living of the society.

SOLID WASTES

Part of solid wastes produced is recycleable like paper, plastic, glass, etc., and is picked up for recycling by a section of the society. Solid wastes, therefore, can be defined as disordered material of the society and, in unsewered areas, even night-soil forms a part of solid wastes. Solid waste is also generated by various industries and institutions which is required to be managed by the management of industries and institutions.

Solid Waste contains large percentage of organic/putrefiable materials and due to climatic conditions in India its daily removal and scientific disposal is a must from the health and aesthetic points of view.

Imperative

Requirements of solid waste management thus need to be

kept in view by planners and local authorities, while planning for a new town or small and medium town and also for the extension of existing townships and metropolitan areas.

Magnitude of the Problem

For proper assessment of organisational, equipment and disposal requirements of solid wastes, it is necessary to assess the quantity and quality of solid wastes generated which have to be managed in a human settlement. There is very large variation in quantity. The quality is not only different in various cities but also varies in different parts of the same city. This variation is due to:

- (a) Variation in economic status of the inhabitants of various towns and areas of the same town or city; and
- (b) Variation in activities.

That is why the generation of wastes varies from 250 gms. to 1000 gms. per capita. Even the density of garbage has also large variations due to reasons given above and it varies from 100 kg. per cu.m. to 600 kg. per cu.m.

Administrative Set-up

Solid waste management is generally controlled by health officers assisted by sanitation staff. The Government of India, considering the importance of the subject appointed a committee to go into the problems of solid waste management and make recommendations for effective management of solid wastes under the chairmanship of Shri B. Sivaraman, the then Vice-Chairman, National Commission on Agriculture and the Member, Planning Commission. This committee submitted its report in 1975. The committee, recommending on administrative set-up, observed:

The services of the public cleansing, mechanical transportation and proper disposal of urban wastes should be put under unified control of a qualified public health engineer supported by qualified junior staff in different disciplines. To begin with, all local authorities in cities with population over one lakh should implement this suggestion.

—(Recommendation No. 7)

It may be mentioned that solid waste management is being controlled by engineers in certain municipal corporations like Bombay, Calcutta and Delhi. Pattern of staffing yardstick is yet to be worked out as is prevalent for usual engineering works.

Short-term Strategy for Human Excreta Disposal

The necessity of disposal of human excreta by water-borne system needs no emphasis but due to financial constraints and time required for laying sewers, water lines, and sewage treatment plants, it is not possible to provide sewage system everywhere. Entire area of even metropolis like Delhi is not sewered till today due to constraints mentioned above. It is, therefore, desirable to provide a proper living environment by providing basic minimum services in small and medium towns. The sewers can be provided later on. The disposal of human excreta can be through 'pour flush latrine' which can be connected to sewers as and when that facility is available. This type of latrine has got squatting pan with a trap having a water seal of about 20 mm. to 25 mm. and can be flushed with water used for anal cleaning. The excreta is discharged into one of the two pits provided as per requirements based on number of users. The other pit is utilised after the first is completely full. The first pit is allowed to remain covered for about 18-20 months during which the excreta gets converted into compost and can be excavated when needed. The compost thus dug out can be utilized for farming. This will also avoid manual handling of excreta. This system will also reduce the requirement of water in the first instance, which is one of the basic necessities of life for towns.

COLLECTION OF SOLID WASTE

Source and Collection of Solid Waste

Sources of solid wastes generation could be: (i) industrial units, (ii) commercial and institution complexes, (iii) households, and (iv) road side sweeping.

Solid waste generated by: (i) and (ii) above is generally managed by owners of the industries or institutional organisations.

Solid wastes generated by households is delivered by customary private safai karmacharis to collection centres provided by the local authorities. System of door-to-door collection has not yet developed in India and is not being dealt with here.

Road side sweeping is the responsibility of the local authorities. In recent past, these sweepings were carted by the safai karmacharis as head loads to collection centres. But this system is being changed and safai karmacharis are now utilising wheel barrows for cartage of road side sweeping at least in the Delhi Municipal Corporation. The wheel barrows are generally stored on road side, after the day's work has been completed by a safai karmachari. Hence space is required for the storage of these wheel barrows. It will be desirable to provide an office for Assistant Sanitary Inspector/Sanitary Inspector in the area which can also provide for storage of wheel barrows, stores for the items of daily use and can also work as a liaison office for the proper up-keep of the area and for keeping contact with the public. Number of such units will be dependent on many factors one of which is the strength of staff both workers and supervisory. The yardstick adopted in the Municipal Corporation of Delhi for sanitation staff is as under:

Yardstick for Road Sweeping

- (a) Congested area—One safai karmachari for 2,322.5 sq. mtrs. (25,000 sq. ft.)
- (b) Medium areas—One safai karmachari for 4,645 sq.mtrs. (50,000 sq.ft.)
- (c) Open areas—One safai karmachari for 9,290 sq. mtrs. (1,00,000 sq. ft.)

Yardstick for Open Drains

- (a) *Shallow drains: 9"*—one safai karmachari for 1067mtrs. 3,500 sq. ft.)
- (b) *Deep drains carrying sullage*—one safai karmachari for 762 mtrs. (2,500 sq. ft.)
- (c) *Sullage drains:* one safai karmachari for 305 mtrs. (1,000 sq. ft.)

(d) *Storm water drains*: One safai karmachari for 1,600 mtrs. (5,280 sq. ft.).

The work of 20-25 safai karmacharis is supervised by one Asstt. Sanitary Inspector/Sanitary Guide. One sanitary Inspector supervises the work of 4-6 ASIs/Sanitary Guides and there are C.S.Is and Sanitation Superintendents for further supervision, control and guidance.

Planning Implications

(a) *Office location*: While planning new areas, it will be appropriate that suitable sites are earmarked for offices of ASIs, S Is with a provision of storage facility.

(b) *Site for Quarters of Sanitation Staff*: Site for quarters of safai karmacharis be also earmarked in the plan layouts so that their place of work is not far off from the place of dwelling. Moreover, this will help in avoiding segregation and give an impression of mixed colony as recommended by the Shivaraman Committee.

(c) *Collection Centres*: Refuse generated from various households, institutions and road sweepings is collected at suitably located collection centres. These collection centres carry different names in different areas and in Delhi, a covered collection centre is called '*dalao*' which has the capacity of 20-25 cu.m. and the open collection centre is called a dust-bin having a capacity of 2-3 cu. ms. For proper up-keep of '*dolao*', space for small store or chowkidar hut alongwith space for loading of refuse is also required.

The Municipal Corportion of Delhi has developed a split level '*dalao*' where waste is collected at higher level and is loaded into a truck parked at lower level by just dragging. It has helped in creating a better sanitation minimising the loading time and fatigue of the workers. This type of '*dalao*' can be provided where the feeding area is higher than the collection centre by about 1.3 mtrs. to 1.5 mtrs. so that split level can be achieved without any drainage problem at truck parking place.

Liftable bins can be substitutes for small dust bins but equipment for lifting it and emptying it into truck is yet to be developed. This could minimise double handling by the safai

karmacharis.

Locations of dust bins and 'dalaos' should be earmarked in the layout plans at the planning stage because once houses come up, it is not possible to construct collection centres which perform a very important role in the solid wastes management. Locations should be such that vehicles get more accessible roads with proper and easy approach as well as turning space, if needed.

Transportation

Transportation of solid waste to disposal sites is as important as collection. Vehicles, equipment for this purpose have not yet been standardised. In small towns, the wastes is carted even by bullock carts. Till recent past only flat body trucks were being utilised for transportation. These were loaded and unloaded manually. Hence, the labour had to move along with the vehicle for which a cabin had to be provided along with the cabin of the driver. This reduced the carrying capacity of truck by about 20 per cent. Apart from that, the time taken for loading, unloading used to be more than the travel time and hence trucks were not utilised optimally. Improvement over this aspect has been achieved by utilising trucks with tipping arrangements which saves unloading time and cabin space for workers is added to carrying capacity because all the workers are not needed to go with the vehicle for unloading.

Another equipment front-end-loader is now available for loading wastes into trucks. This reduces the loading time resulting in more trips by the vehicles. Though initial cost of this system is there but ultimately it is economical. This equipment, of course, can be used when sufficient space is available and collection centre is big enough to allow free movement of equipment.

Trolley tractor can be utilised for cartage of wastes from congested areas where trucks cannot enter. As tractor is not an equipment for long distance travel, transfer stations are needed for transshipment of wastes to fast moving vehicles especially where disposal sites are far off. Equipment called carrier container has recently been introduced which is an

improvement over the tractor trolley system.

Certain other equipments like 'mobile compactors' and 'hydracon roll off tippers' have recently been developed. The former are being utilised in Bombay and Calcutta whereas the latter in Ludhiana. Before the equipment for transportation of solid waste is standardised, lot of research and development work will have to be done, keeping in view the tough task it has to do by moving over the loose terrain at disposal sites. Whatever type of equipment is utilised, maintenance of it will have to be taken care of. The Sivaraman Committee recommended for repair workshop of transport vehicles, their parking, and fueling arrangements in all the towns having a population of 3 lakhs. At the time of initial planning, space for such workshops will have to be earmarked. Where disposal sites are so located that transfer stations are needed, the sites for these will also have to be earmarked in the layout plans.

Disposal

Scientific disposal of solid wastes is one of the important aspects. Generally the following methods of disposal are adopted:

- (i) Sanitary Landfill,
- (ii) Composting, and
- (iii) Incineration.

Sanitary landfill is the most common and cheap method. Of course, it consumes land and is sometime helpful in reclaiming lands also. Solid waste containing organic matter when dumped gets converted into compost in due course of time. Certain local bodies have been selling this compost to farmers. Composting can be accelerated by mechanical arrangements which is now gaining momentum. Machinery for composting is still to be standardised, especially with reference to its utility for small local bodies. Compost cannot be considered as final disposal because all the wastes are not consumed by it and rejects of compost which vary from 40 to 60 per cent have to be disposed of by landfill method. Compost-

ing as such could be considered a complementary system of disposal to sanitary landfill. Incineration has not yet been adopted for solid wastes disposal, in general, in India. In certain hospitals, no doubt, the hospital waste is disposed of by incineration. Residue of incineration, of course, has to be disposed of.

Planning Implications

Site for disposal of solid wastes should be earmarked, while planning new townships or extension of towns keeping in view the following points:

1. Prevailing wind direction;
2. Ultimate use of filled up area;
3. Risk of pollution transferred during filling;
4. Ecology of the area;
5. Risk to water source;
6. Approachable sites by roads capable to catering to the traffic generated;
7. Suitably away from residential areas for preserving the environment; and
8. Should be so located that it does not create risk of bird strike on the air craft.

Public Relation

Public participation and cooperation is a must for keeping environment clean. It is, therefore, necessary to arouse the individual concerned for personal health and well being. For this purpose suitable posters and leaflets emphasising various aspects of keeping the environment clean should be prepared and distributed to the house hold, school going children and others at their place of work. Films and cinema slides can also be prepared and shown to the public. Mass media can be utilised to impart information and education to individual on personal health and well being. Assistance of people of influence such as religious leaders, elected representatives, trade union leaders, etc., should also be sought to gain the confidence and cooperation of the public.

To secure acceptance of public for new sites of collection

centres and disposal it is necessary to educate them well in advance by spelling out the necessities and benefits which can accrue to the public from a most hygienic and clean environment. □

ENVIRONMENTAL SANITATION AND HUMAN WASTE MANAGEMENT FOR THE INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS

B. PATHAK

I am glad to have been invited to participate in the deliberations of the seminar on "Integrated Development of Small and Medium Towns". I am happy to know that the development of small and medium towns, besides metropolitan and class I cities, has attracted the attention of the Government of India. This is most important as all facets of development are being considered simultaneously.

It was around 1876 that urban development received attention in India. Following industrialisation, the growth of modern urban-industrial-capitalism, brought new transformations in the economy, society and political structure of the country being bye-products of western civilisation. The economic policy of the Britishers was to collect raw materials and sell the finished products in the markets of this country. As a result, the progress of urbanisation was very slow from 1876 to 1941. Urbanisation picked up momentum during the decade 1941-51, following World War II during which the Britishers turned India into a base for war preparation. It was actually after Independence in 1947 that planned growth of cities started. It was in 1945 when Indian industrialists prepared a plan for the development of the country popularly known as the Bombay Plan, that in 1952, when planning first started in India, the Bombay plan was considered as its base.

Population of major cities in India after independence grew up so tremendously that the planners were taken aback and the symptoms of unplanned growth started in almost all cities of India. This naturally resulted in the scarcity of pure water, roads, underground drainage, sewers, etc. The government found itself unable to provide even the basic necessities of life to the rapidly growing population. Even the law and order situation was out of its control. Unplanned construction of houses started in a big way. Mass encroachment of roads and open spaces followed. The roads, lanes and bylanes became narrower resulting in slow vehicular movement and traffic jams. Municipal rules were openly violated and there was chaos everywhere.

Medium and small towns which will come up in future may have provision for pitched roads, underground drainage, parks, schools, colleges and town halls, etc. The problems be setting the old cities and towns are enormous and difficult to solve. But let us not be too much pessimistic and we should find out some ways and means for environmental sanitation and integrated development of small and medium towns. Some arrangements have been made for the government employees as well as for the business community. The only exception is the labouring class for whom no attempt has been made either by the government or non-governmental agencies to improve their lot. These unfortunate people have nothing but some kind of small huts to live here and there, and even many of them pass their days under the open sky. As a result, slum have found their way and sprung up in the centre of cities. A few lucky ones among them have constructed small brick houses and are living in them without any amenity whatsoever.

The condition of medium and small towns is far worse. There is hardly any drainage and water supply system, what to speak of pitched roads; nor is there any recreational facility for its people. As they have been living in such towns for a long time, they have adapted themselves to these conditions. In fact, they have no other alternative except to cling to these places.

Before embarking on the subject of environmental equipment and technology, I would like to point out that Sulabh

International engaged in the programme of converting service latrines into Sulabh Shauchalayas, (pour-flush sanitary toilets) and also in construction of community Sulabh Shauchalaya complexes (toilets, baths and urinals). For the safe and hygienic disposal of human excreta in medium and small towns, the sewerage system can neither be adopted for its heavy cost of construction nor the local bodies can afford to meet its maintenance. Moreover, the Government of India is also of the view that the sewerage system is not suitable for medium and small towns. Hence this system is ruled out for such towns. Another system—septic tank for the disposal of human wastes is also available but that too cannot be used by more than 15-20 per cent of the people because of its prohibitive cost.

The best way for environmental sanitation in small and medium towns is to convert all the service latrines into Sulabh Shauchalayas (pour-flush sanitary toilets). I have come to the inescapable conclusion that although several other designs of hand flush latrines like PRAI, ESP and RCA have been developed and installed, the two-pit privy system alone is the best among all the heterogenous mass of latrine designs produced in the world. In the earlier designs of the system sent by the Government of India, PRAI, ESP, RCA, there was provision for only one pit and it was suggested that when one pit was full the second one should be constructed. This was not found satisfactory as it was not practicable to construct a second pit over-night. Secondly, the cost of construction of the second pit would go up with the passage of time, and thirdly, the very object of relief to scavengers would be defeated as fresh excreta would need cleaning by scavengers alone in the one-pit system. The two-pit system with water-seal, which is popularly known as Sulabh Shauchalaya, which has been widely accepted, seems to be the best system for the disposal of human wastes where the people use water for ablution. On the basis of our experience, it can be said that Sulabh Shauchalaya, in addition to its scientific soundness and technological adaptability, is culturally relevant, socially acceptable, economically viable and easy to operate and maintain. It can safeguard public health and is capable of recycling wastes.

By virtue of being a hand-flush water-seal latrine, Sulabh Shauchalaya fulfils all the seven conditions laid down by Wagner and Lanoix:

1. The surface soil should not be contaminated.
2. There should be no contamination of ground water that may enter springs or wells.
3. There should be no contamination of surface water.
4. Excreta should not be accessible to flies or animals.
5. There should be no handling of fresh excreta; or when this is indispensable, it should be strictly kept to a minimum.
6. There should be freedom from odours or unsightly conditions.
7. The method used should be simple and inexpensive in construction and operation.

Out of the two pits one functions at a time while the other is kept closed. The second pit is opened for use when the first is filled up. While the second pit is in use, the human excreta gets transformed into manure in the first tank. Sulabh Shauchalaya can be adopted by all classes of people, rich and poor. The Sulabh International has developed so many designs, some of which have been appended (see Fig. 1 and Fig. 2).

In houses where there are no service latrines, new Sulabh Shauchalayas should be constructed. No extra labour is needed for their maintenance and cleanliness and the house-owners themselves can do it. If tanks are cleaned once in the presence of house owners and the method of changing the drain is explained to them, they will not feel any difficulty.

For those who have no space for providing a latrine in their houses or those who are homeless, footpath and Jhuggidwellers and the floating population, community Sulabh Shauchalayas (public conveniences) should be set up to improve the environmental sanitation of the town. Such public latrines have proved very popular in Bihar as also in other states of this country like Orissa, West Bengal, Madhya Pradesh and Uttar Pradesh, etc. Baths are provided as an adjunct at strategic places. The Sulabh International undertakes the maintenance

SULABH SHAUCHALAYA : CIRCULAR TYPE

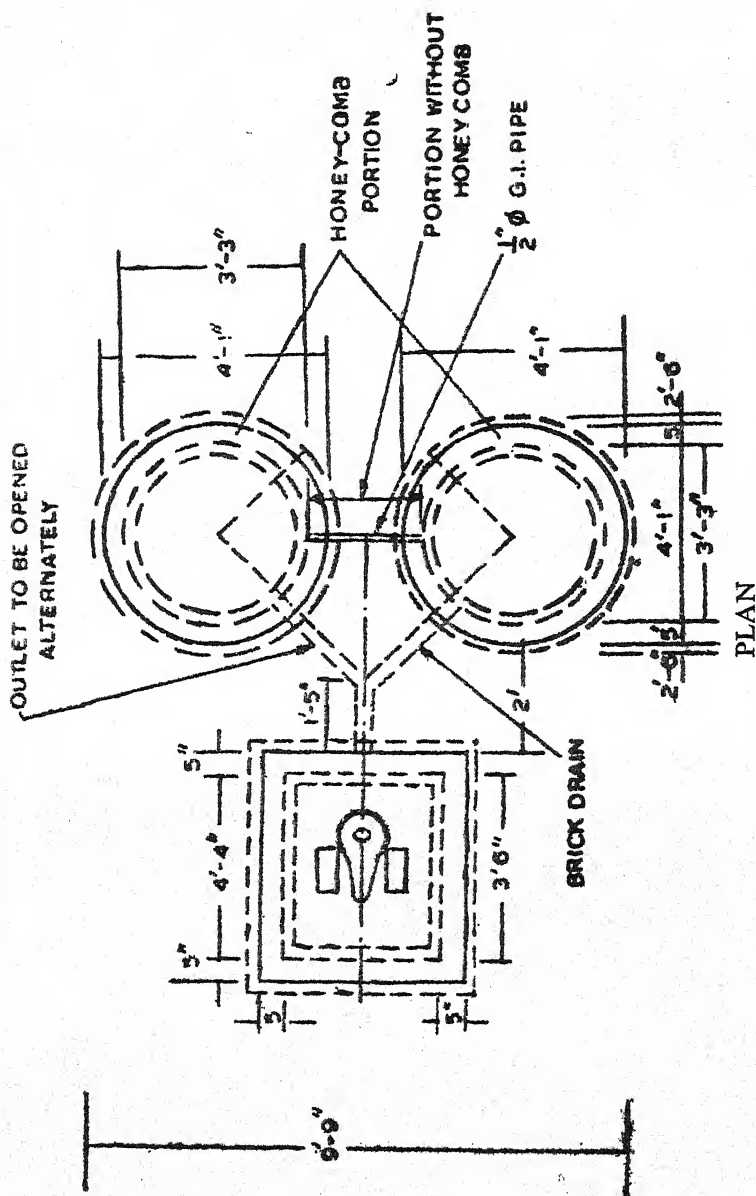


FIG. 1. Honey-Comb is not to be provided in coarse and moorum soil.

SULABH SHAUCHALHYA: RECTANGULAR TYPE

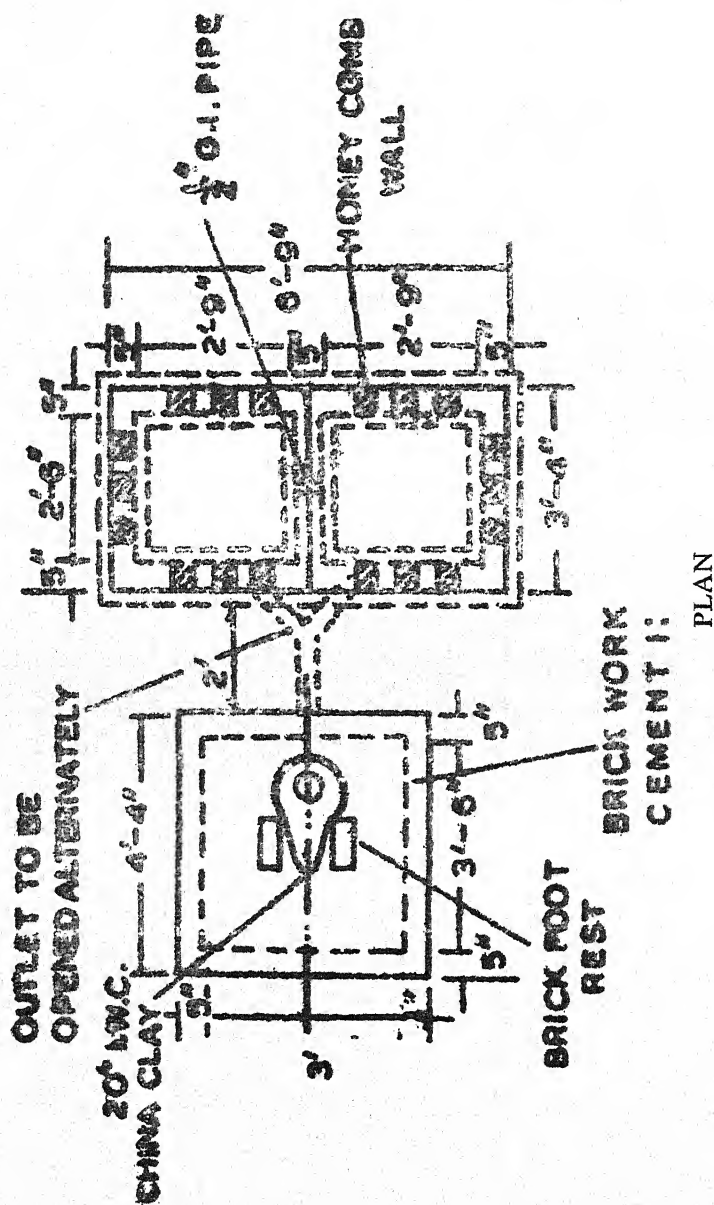


FIG. 2. Honey-Comb is not to be provided in coarse and moorum soil.

of the public latrines-cum-baths. A twenty-four-hour attendant service is provided to ensure cleanliness of the latrines under use to provide the user assistance and to keep constant vigil. A nominal fee of 5 paise is levied per user (excluding women and children) and another 5 paise for providing soap on request.

The conversion of dry latrines into water-seal privies is a welcome relief to the house owner from all standpoints. It is not surprising, therefore, that the programme has its impact and is making a good progress, giving relief to the latrine user and a physical solution to his problems. In Patna, open air defecation near the Gandhi Maidan had been a product of compulsive user in the absence of any alternative available until the provision of a water-seal public latrine and bath complex transformed the place beyond recognition. The location of public conveniences near railway stations, bus stands, government offices, hospitals, markets and places frequented by itinerant population ensures community participation only because they meet their felt needs. Their continued maintenance in a clean and sanitary condition ensures their growing popularity. The factors which attract community participation to this programme are the character and functional role of the executing agency, the inherent acceptability of the conversion system and the financial and procedural aid extended to the house owner.

It is a common knowledge that human excreta is reservoir of the causative agents of enteric diseases such as cholera, dysentery, typhoid and paratyphoid fevers, infectious hepatitis, hookworm, ascariasis and other infections. The consumption of polluted water, contaminated food and exposure of population to polluted soil results in the transmission of infectious germs from the sick to the healthy in the community. Excreta also contains putrescible materials which are responsible for bad odours and obnoxious conditions. Decomposing excreta also provides an ideal breeding ground for flies, an important vehicle for the transmission of enteric diseases. Proper disposal of human excreta is also vital for protecting the aesthetics of the environment in which people live and in preventing fly breeding. The bucket latrine is a potential hazard both to health and hygiene.

In my opinion, along with other civic amenities the provision of Sulabh Shauchalaya and bath in private houses and in public places will be an appropriate and adoptable technology to help and keep the environment of small and medium towns clean. ☐

IMPROVING SERVICES FOR THE URBAN POOR

WILLIAM J. COUSINS

VULNERABLE SECTIONS OF THE POPULATION UNICEF CLIENTS

The three most vulnerable segments of the urban population are children, women and the poor. Naturally these categories overlap, and they represent the main groups with which UNICEF is concerned. They are also groups with which anyone involved in urban development must be concerned, because children and women are not only the most vulnerable groups but they are also crucial in the economy of the cities, and crucial for the future of the cities. In addition, both the actual number and the proportion of poor people in cities is growing. Conservative estimates classify one out of three city dwellers as poor.

Unfortunately, the basic needs of poor urban families are not being adequately met by the conventional service delivery institutions despite the share of resources which go to urban areas. This is due to the fact that the poor have less access to services whether they live in rural areas, small towns or in metropolitan areas. This paper suggests an approach for improving and extending access to basic services to these groups.

BASIC NEEDS ("WHENEERS")

These basic needs are:

Water for drinking and household use.

Health care, preventive as well as curative.

Education, pre-primary and primary, as well as out of school education for children and women.

Nutrition, adequate for growth, play and work.

Economic activities, especially for women.

Environmental sanitation, including low cost drainage, latrines and trash collection.

Recreation, especially for children.

Shelter improvement for protection, privacy and security.

THE BASIC SERVICES APPROACH

Since the needs are great and the resources are limited, UNICEF advocates a low cost, replicable strategy which emphasises systematic community involvement. This strategy is called the basic services approach, which rests upon locally selected and trained community volunteers who are linked to the formal service structure by para-professional workers. Such an arrangement frees highly skilled professionals for the important tasks of training, supervision and specialised services. It has been used very successfully in places like Jamkhed in Maharashtra. It can also be used to help meet any of the needs already listed.

One implication of this approach is that an interim strategy might be: Instead of seeking people's participation in agency programmes, agencies should seek ways of participating in people's programmes. The assumption is that people are presently meeting their needs in some fashion; no matter how inadequately. For example, their very survival indicates that they are getting food and water from somewhere. In addition, when they are ill they get 'medical care' from some source; whether it be a dispensary or clinic, a registered medical practitioner, a 'quack', a traditional birth attendant, a traditional medical practitioner, or simply neighbours who know more about an illness than they do.

Thus, in order to reach more people with basic services we begin with the modest goal of trying to help people make marginal improvements in the ways that they are presently meeting their needs. The first step would be to make a quick study of what they are doing now to meet their needs. The

second step would be to seek ways of helping them to meet these needs effectively. For example, if pregnant women depend upon traditional birth attendants at present, the task of the intervening agency is to work with those traditional birth attendants to upgrade their skills and methods marginally and link them in a referral system to the established maternity and child health institutions. For example, at Jamkhed, the *dai's* improved kit costs 50 paise and consists of a small sealed plastic envelope to be opened at the time of delivery. It contains a sterilized razor blade, a piece of thread and a tiny bottle of iodine for cutting, tying and sterilising the umbilical cord.

SOME EXAMPLES OF POSSIBLE ACTIVITIES

Some examples of ways in which marginal improvements might be made in meeting basic needs are:

Water: Since in the immediate future, all of the urban poor will not have access to piped treated water, it is necessary to explore appropriate, low cost, practical ways of improving the quality and quantity of their existing water supply. In some cases this may mean chlorinating an open well with a pot chlorinator made from a *matka*. In other cases, it may be feasible to have some kind of low cost filter system. In still other cases of communities which are remote from the water mains, it may be possible to sink a tube well and instal an inexpensive pump to lift the water to a slightly elevated storage tank with taps around it. Solutions must be sought which are within the means and understanding of the local people.

Health: Community health programmes should emphasize health maintenance rather than sickness, preventive health and health education. They should also be appropriate and low cost. Local community health workers, preferably women, can be selected by their neighbours to receive basic training in exchange for which they would make a commitment to share their knowledge with their neighbours. Such workers would only use remedies which are within the means of their neighbours rather than expensive medicines such as

antibiotics. They would also be taught to recognize infectious diseases and dangerous ailments and refer them to the formal health system for treatment.

Education: This should be local, non-institutional and related to the everyday life of the people. As long as there are some people in the community, youth or adults, who can read or write, they could be taught the skills which would enable them to help illiterate children and women to read and write the words and also help them to do their jobs more effectively. This could be as the beginning of functional education.

Nutrition: The task would be to decrease malnutrition and improve the nutritional status of young children and pregnant nursing mothers within the existing family income. A community volunteer could learn basic nutrition education and be given some ideas for increasing the quality and quantity of food consumed in his or her neighbourhood such as:

Help people get access to ration cards and government ration shops;

Encourage groups of people to do bulk purchasing of staple foods so that they could get them at wholesale prices and increase the actual amount of food for the same amount of money;

Introduce more nutritious recipes; and

Encourage pregnant and nursing mothers to eat balanced diets and continue to breastfeed their babies.

Economic Activities: The possibility of practical feasible income generating activities for women would have to be explored locally with particular attention to marketing, quality control and management. New as well as traditional occupations should be explored. One possibility would be part-time employment in some of the community based services described here. Other forms of assistance would be loans to vendors and training of domestic workers.

Environmental Sanitation: One possibility is the introduction of low cost, hand flushed water-seal sanitary latrines of the type used by Shulabh Sauchalaya Sansthan. Another possibility is the recruitment of a local person who would concern herself/himself with maintenance and improvement

of the environment with the help of neighbours. For example, after some simple training, he or she would have responsibility for public health education, seeing that drains are kept free and flowing, seeing that taps or pumps are functioning and making simple repairs as necessary, seeing that lanes are swept and trash collected in one place to be removed by the municipal authorities. Such an environmental worker from the community would be linked to the municipal sanitation system and be supported by it in the municipal sense that the authorities would be responsive to the needs which the worker communicated to them.

Recreation: This is an important need which could be met through a variety of activities ranging from the community celebration of local festivals to the organization of sports and games for children, to opportunities for artistic expression using inexpensive materials (*e.g.*, painting on old newspapers or playing music on china bowls with water at different levels). It could also include cultural and educational tours to various places of interest in the city such as zoos, libraries, museums, dairies, newspaper plants and so on.

Shelter Improvement: Many poor people live in self-built or *kucha* houses and do not qualify for bank loans for improving their structures. One approach to shelter improvement might be to have a godown of traditional building materials ranging from rolls of polythene to bamboo, matting, GI sheet and tiles, etc., where people could take loans in kind for improving their present shelter at a pace which they could afford. For example, a person might feel that this year he would attempt to make his roof more waterproof by spending Rs. 200 or Rs. 300 for some kind of appropriate materials. Some very poor people could benefit from such a scheme. However, long term investments in shelter improvement require that the poor have security of tenure on the land on which they live.

POSSIBLE AREA OF UNICEF ASSISTANCE

UNICEF could support and encourage such activities by giving assistance in such areas as:

1. Training;

2. Appropriate supplies and equipment;
3. Economical transport;
4. Staff for formulating community activities on a time bound basis;
5. Strengthening institutions which would be involved in extending basic services;
6. Matching grants for self-help programmes; and
7. Monitoring and evaluation.

CRITERIA FOR UNICEF ASSISTANCE

While deciding upon UNICEF assistance the following ten questions should be asked:

1. Is the activity directed primarily toward benefiting poor children and women?
2. Does this activity lead directly or indirectly to the reduction of infant and maternal mortality and morbidity?
3. Does it enhance the growth and development of children?
4. Is it sufficiently low cost to be able to be maintained and widely replicated within existing resources?
5. Is there community involvement?
6. Are voluntary organisations involved?
7. Does it enhance the capacity of local people to plan and carry out their own development activities?
8. Is it coordinated with other related, mutually reinforcing activities?
9. Is there a provision for monitoring and evaluating the activity?
10. Does it duplicate any similar activity in the area?

STEPS IN THE PROGRAMMING PROCESS (SSNAP)

Situational analysis of poor children and mothers from secondary sources: demographic, economic, social services both governmental and non-governmental, needs, problems, resources, constraints, gaps, recommendations.

Site visits for a first hand impression and assessment of

situation with local officials and citizens leading to project identification.

Needs analysis at the proposed project site involving the potential participants. How are they meeting basic needs now? Relative coverage by formal and informal institutions. Needs, problems, resources, constraints, gaps, recommendations.

Activities begin as specific needs are identified, *e.g.*, improved water and sanitation, health, nutrition, etc., even before the studies are completed.

Plan of Action is developed including:

General objectives

Background of project.

Specific objectives and targets, *e.g.*, 100 per cent immunisation of children between 0-5 years, reduction of malnutrition or female illiteracy.

Programme activities, *e.g.*, training, community organisation, organisation of *balwadis*.

Organisational arrangements, *i.e.*, who assumes responsibility for what, at each level, *e.g.*, planning, coordination, implementation, administration, monitoring and evaluation.

UNICEF assistance required for what purposes, *e.g.*, training staff, transport, supplies and equipment, matching grants, monitoring and evaluation.

Phasing of activities and assistance over time.

Government contribution and responsibilities at each level.

Plan for monitoring and evaluation. ☐

PLANNING FOR THE URBAN POOR

S.K. SHARMA

While the focus of thinking at the national and state level is towards ameliorating the living conditions of the urban poor through environmental improvement of slum colonies and better housing facilities, the translation of policy into action often tends to get neglected. Public opinion is generally critical of encroachment of public areas by slum dwellers and the unhygienic conditions created thereby. Public housing agencies, in spite of clear policy directives, often fail to meet the requirements of the poor in regard to both the costs and the creation of a proper environment to live in. The question is: Can the growing needs of the urban poor be substantially met in a planned manner? Perhaps the magnitude of the problem renders it difficult to achieve a wholly satisfactory solution. Yet, innovative planning may be able to bring about substantial improvement in the efforts being made at present.

This paper attempts to highlight the key-role that planners can play in this effort and how a good environment for the poor to live in can be created at acceptable costs. The case study of a planning exercise undertaken in regard to a slum resettlement project in Kotra Sultanabad in Bhopal has been utilised for highlighting some of the vital issues.

THE SLUM PROBLEM

Every city, large or small, is facing a serious slum problem. Public areas are being indiscriminately encroached upon by emigrants from rural areas and illplanned, grossly under

serviced slum colonies are cropping up at an unprecedented pace. Enforcement agencies are finding it impossible to cope with the situation. The policy which is being adopted today is to recognise, wherever feasible, the slum settlements and bring about improvements through environmental improvement programmes. Colonies whose land-use is indicated for housing purposes in the city plan and which do not seriously interfere with the overall scheme of the city are brought under this programme. Attempts made to improve the layouts without seriously disturbing the housing units and improvements in services like roads, street lighting, water supply, sanitation, etc., are realised through the environmental improvement programmes. A practice which is being strongly advocated, is to give legal rights to slum dwellers on the plots in their possession so that they become entitled to bank loans and have greater incentive for improving their condition through self-help. Often, efforts are also made to initiate in the slum dwellers a sense of awareness to public hygiene and sensitivity to their social obligations.

In sensitive public areas like those near the railway stations, public buildings, commercial centres, etc. regularising the unauthorised settlements may not be feasible from the overall planning point of view. In such cases, where the settlement is not consistent with the overall land-use of the city, resettlement of the slum dwellers becomes inevitable. In such cases, resettlement programmes are launched and efforts made to reallocate the slum dwellers at appropriate locations.

Finally, major housing programmes are launched by the public housing agencies for the economically weaker sections (EWS) for whom the ceiling limit on costs has been placed at Rs. 8,000 per housing unit. The first two approaches are corrective, that is to say, attempting to solve a problem after damage has already been done, whereas this programme attempts to meet the future need. Some of the slum dwellers are also expected to take advantage of this programme. This programme has, however, largely failed to reach the people for whom it is primarily intended. The housing agencies are contending that, with increasing costs, it is impossible to provide housing units for Rs. 8,000 or less and invariably, in project execution there are cost over-runs and the unit cannot

be afforded by the weaker sections for whom it is intended. In any case even Rs. 8,000 is far beyond the reach of most poor who, therefore, prefer to live in slums costing a few hundred rupees. In order to reduce initial costs, various innovations like skeleton housing, sites and services programmes are attempted with varying degrees of acceptability and success.

It seems that it is essential to recognise a sub-EWS category and plan for them. It is only then that it may be possible to somewhat curb this tendency to indiscriminately occupy open public spaces and provide for an essential service community.

THE SERVICE COMMUNITY

In Indian conditions, a large service community is required for a city to function. Sweepers, scavengers, domestic servants, peddlers, all are essential parts of the life of a city and unless they are there, a city will not be able to function. This service community is required to be located close to the work place for, otherwise on account of inadequacy and high cost of public transport, cost of services would be very high. It is, therefore, imperative that the overall city plan makes adequate provision for the service community at suitable locations near the work centres. While planning for urban development it is essential to assign additional area, say, 15 or 20 per cent or more of the total area under development, for the sub-economically weaker sections over and above the provision of EWS housing, in the development plans of the publichousing agencies. These areas with minimal site and service facilities should be made available to the emigrant service community at exceptionally low cost and the balance expenditure should be charged to the overall development. Such cross subsidisation seems inevitable to ensure providing for service communities, essential for the life of the city, and to curb the growth of unauthorised occupation of open spaces with resultant heavy public costs at a later date. Such vital issues need concerted attention of the policy makers, planners and developers, if the cities are to be protected and, at the same time, the essential service communities are to be accommodated. Such earmarked areas should be handed over to the

Slum Clearance Boards or such other agencies to ensure that they reach the right people.

THE ENVIRONMENT TO LIVE

While making provision for the sub-EWS community in the overall city plan is of crucial importance, the laying of acceptable minimum standards for the creation of a proper environment to live in, is even more vital. The serious limitations of affordability of the beneficiary necessitates cutting down on building costs. Substantial research has gone in reducing building costs by cutting down on built-up areas to the barest minimum, using traditional or newly developed materials, improving structural efficiency, constructing row houses with common walls and services, and such other techniques. The problem of housing for the poor has thus been handled essentially as an engineering problem. There is no doubt that considerable savings can be brought about by adopting innovative building techniques. Such engineering solutions, however, have their limitations. After the size of a housing unit has been cut down to the barest needed and innovative engineering methods have slashed down the costs to the barest minimum, further education in cost is not possible.

The mounting construction costs and the static affordability of the poor is making the housing units beyond the reach of those for whom they are intended. While efficiency in construction methods is important, the real economy, it seems, lies in efficient layouts. The layout also plays a vital role in creating a proper environment to live in. Much greater attention, therefore, needs to be given to improve the environment in which the poor are expected to live and at the same time, reduce costs through better site planning. The interesting aspect is that through an appropriate planning approach, not only can significant economies be achieved but, at the same time, the quality of life can also be substantially improved. This paper essentially attempts to establish this.

PLANNING TRADITIONS AND PRACTICES

Over years, planners have evolved certain patterns for deve-

lopment of housing colonies. Housing colony layouts provide for roads, open community spaces and services like electricity, water supply, sewerage, etc. Effort is made to establish a hierarchy of roads and open spaces and provide plots of appropriate sizes depending upon the income groups for whom they are intended. In the higher income groups, plots are relatively of bigger size ranging from 30' x 50' to 50' x 80' whereas in the case of housing for the poor the plot size is slashed down to, say 12' x 30'. In the higher income groups there is a reasonable amount of open space around the housing unit providing for privacy and comfort. In the case of housing for the poor, however, there is no option but to string the housing units along the length of road, in rows with small open spaces in the front and at the back. Such housing tenements of the size say 10' x 12' in rows can hardly be expected to create a good environment to live in. The occupants have no privacy from the neighbours, nor are they protected from the hussleb ussle of the road on to which they frequently *spill over their own activities like placing a cot or doing an odd job*. Small children loiter around and play on the road with little security. A colony of 1000 such houses creates a totally impersonalised environment for the habitants and does little good to community living and other sociological needs. While such layouts do not create a desirable environment to live in, they are also expensive to develop. Each housing unit has a fully developed road in front of it, when the occupant is hardly in need of such a facility. The heavy cost of road construction along with the cost of laying the electricity lines, water supply lines, and sewage lines have all to be charged to the development and added to the cost of the housing unit or borne by the public housing agency. It is evident that such layouts are totally unsatisfactory for constructing housing colonies for the poor. Yet most public agencies have been using and are continuing to use such layouts without giving them even a second thought. They have either become totally insensitive to the needs of those whom they want to serve or have got into the routine of stereo-type planning. Whatever it may be, they have failed to establish their credibility at least insofar as housing for the poor is concerned.

Most of the urban migrants come from villages. Over the years, the rural community has evolved a pattern of housing consistent with their style of living, the socio-climaticological conditions and their economic structures. Little mud structures are placed irregularly creating intimate spaces for each house and a larger community space for a group of houses. For a villager, the outside of house is as important as its inside and he ensures that the layout itself creates such houses that are huddled together so that the shade from one protects the other from the scorching tropical sun thus forming an intimate cluster of houses rather than a housing colony. There is an order in the disorder, planning in the non-planning. These villagers migrating to the urban centres in search of employment, lose their identity. In such housing colonies instead of living, they just exist.

Understandably, the village layout cannot be directly introduced in urban areas, nor can migrants be permitted to plan in their own way. It is for the planners with formal education to evaluate the good points in traditional planning and adapt these to modern urban conditions. Considerable study and hard work from a body of dedicated planners and architects will be required to evolve acceptable planning forms. Nonetheless if an intensive planning exercise is undertaken, basic principles can be evolved.

The cluster housing concept is nothing new or original. It is frequently discussed and promoted at professional levels but when it comes to implementation, it is either overlooked or gets rejected on the ground that it is wasteful in land utilization and inconsistent with modern planning practices. There is little doubt that the cluster housing concept developed and adapted for urban needs through intensive planning exercise may be able to provide a valid solution to the problem of housing for the poor. Such an exercise attempted in the case of a slum resettlement project in Kotra Sultanabad at Bhopal is discussed in the succeeding paragraphs.

THE PROJECT

The Slum Clearance Board, Madhya Pradesh was allotted

land measuring 110 acres in Kotra Sultanabad area of Bhopal on which the Board contemplates to resettle about 2500 slum dwellers who have encroached upon public land in different parts of the city. In order to enable the Board to generate some resources for the development of this area, the state government has permitted it to utilise 15 per cent of the area for commercial purposes. The Board adopting traditional town planning practices developed a scheme which provided for 2700 dwelling units on plots measuring 12' x 30'. On each plot, it was proposed to provide, to begin with, one room tenements. (Chart I)

It was felt that the layout needed improvement in order to create a better environment for the slum dwellers to live in. The project was referred by the MP Slum Clearance Board, to EPCO Designs, the Design Wing of the Environmental Planning and Coordination Organisation, MP* for examining the feasibility of a more acceptable layout. Preliminary exercises undertaken in the Slum Clearance Board for developing a layout on the cluster housing concept indicated reduction in density of housing units, that is to say, inefficient utilisation of land. The attempt was, however not abandoned and the planners were directed to undertake more intensive exercises. One model, of a cluster of 16 housing units was ultimately developed which could form the basis for further study. It gave positive indications of a fair level of land utilisation, reduction in cost of services and definite improvement in the quality of living. The possibilities were, in fact, so interesting that the senior consulting architects of EPCO *Designs*, along with the staff architects of the Slum Clearance Board directed their entire attention to this project. The model developed earlier was followed up by intensive and detailed exercises in overall layout, spacing, services, specifications, materials, open spaces and their hierarchy, sociological problems of change and a host of other complex problems relating to slum dwellers.

A unit of the layout thus developed is illustrated in the

*This organisation was established in 1981 by the Department of Environment, Government of Madhya Pradesh as the principal agency in the state for environmental development.

CHART 1

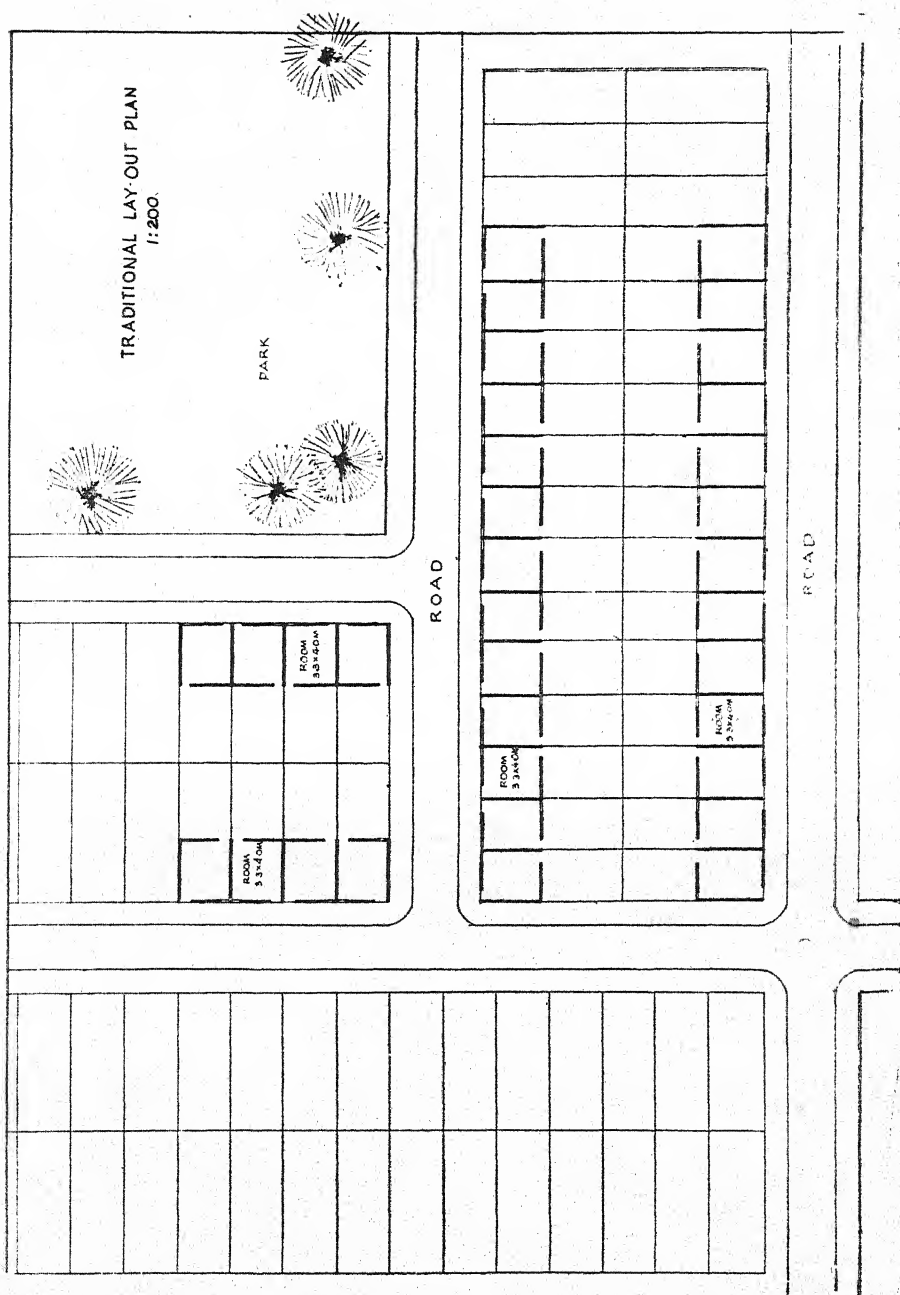


Chart 2. Groups of 16 housing units placed around an enclosed community space with two entry points opening on to a road and a cycle track on either side, have been proposed. The units have been staggered to create a better form for the community spaces and provide a certain amount of privacy to each tenement. A central spine running through the common open spaces takes care of the water line. Community water taps exclusive to each cluster of 16 housing units have been provided. In the context of the central community space provided to each cluster, no front open space has been provided to individual tenements with the result that the entire vacant area at the back of the tenement can be utilised. One toilet seat of CBRI leaching pit design has been provided for two tenements. Though initially only one room tenements are being provided, the occupants will be permitted to construct one room on the ground floor and another on the first floor.

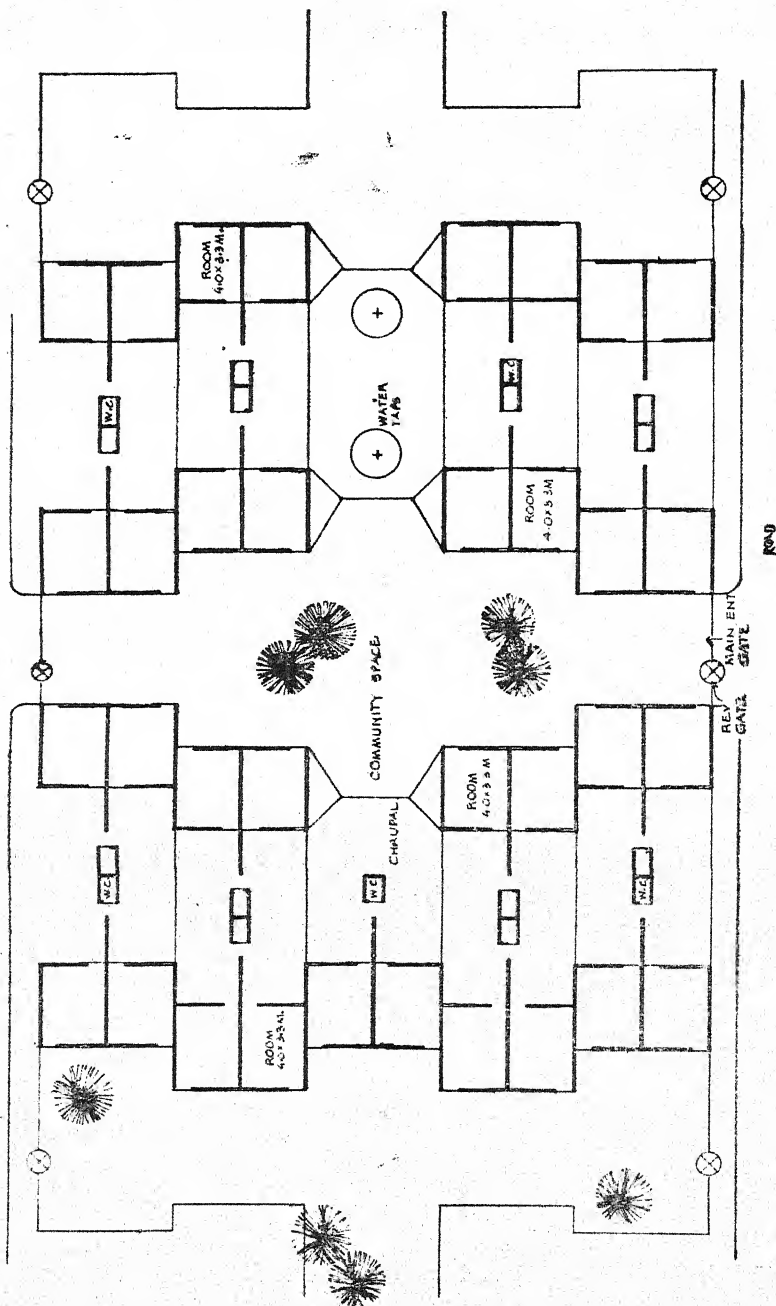
The layout has various advantages as it creates a better environment to live in and is more economical. The 16 families living in the 16 tenements would constitute an intimate community and their enclosed community space would take care of their personal as well as social needs. Over a period of time, these 16 families through self-help can further improve this open space by planting trees and paving portions of it. Since water tap units would be exclusive to these 16 families, they would ensure that they are kept in working order. The entry gates at the two ends of the community space can be locked at night thereby providing adequate security for the families. Since only a small length of the roads would be shared by these 16 housing units, the overall requirements of roads and electricity lines will be less. Likewise, water pipes running through the central spine would be fairly economical.

On a visual perusal, the impression created by the cluster of 16 housing units is that the total number of plots that can be accommodated, will stand reduced. However, detailed layout developed for a 18.40 acre block has shown that as many as 700 housing units can be provided on it thereby achieving a density of 38 units per acre. It may be mentioned that in the earlier plan the density was approximately 32.

CHART 2

TYPICAL CLUSTER
1:500

ROAD



units to an acre in the same block. The development cost (excluding sewer system) is estimated to be Rs. 9 lakhs as proposed to Rs. 11.40 lakhs in the earlier plan. It can, therefore, be safely concluded that through careful planning, the cluster housing concept can be well within acceptable norms both from the point of view of utilisation of land and costs. The model shown in the appended plan is self-illustrative and creative designers and planners can evolve a number of alternative layouts which can be adapted for different projects depending upon the site conditions.

This project is being taken up for implementation by the Slum Clearance Board shortly. The layout will be further checked and detailed out at the time of execution. After the colony is occupied, the reaction of the occupants will be studied and further improvements attempted in subsequent projects.

CONCLUSION

Before concluding this paper, it would be appropriate to make a brief mention of the controversy about development of individual units and multi-storeyed flats. It is generally believed that land can be more efficiently and economically utilised by resorting to construction of multi-storeyed flats. This may not necessarily be correct. Through sensitive planning, if necessary, by adopting duplex individual units, comparable densities can be achieved. In tropical climates flats are not very comfortable to live in and if personalised open spaces can be given within the same land utilisation norms, it would be environmentally more satisfying. Often the vacant area around flats become neglected space. Even if flat tenements are adopted, care should be taken to provide open terraces at all levels. The concrete blocks seen everywhere do little credit to those responsible for creating them. However, in housing for the poor, multi-storeyed development has definitely to be rejected.

It is indeed a matter of pity that basic planning issues outlined in this paper are often overlooked and innumerable colonies are being developed without considerations for environmental needs. The importance of sensitive planning

for an environmentally well adapted development can hardly be over-emphasised. The principles discussed here are equally valid for housing for other income groups particularly, the lower and middle income groups. In planning for the poor, it is essential to strengthen the planning and design wings of public authorities and involve creative designers and architects from outside. It is only then that a desirable environment can be created at acceptable costs. ☐

POLITICAL PROCESS AND DECISION- MAKING IN MUNICIPAL GOVERNMENT: A CASE STUDY

S.N. MISHRA

THE MUNICIPALITY STUDIED

The present paper is a case study of the township of Gaya in Bihar which hopes to unbare the different mechanisms of conflict resolution used by councillors and officials of municipality in diverse situations. The focus is on the role performance of the municipal functionaries of the Gaya Municipality, who play a significant role in the political process and decision-making at municipal level. The data for this study were collected from the said municipality as a part of a larger research project entitled "Politics and Leadership in Municipal Government"—through participant observation, structured questionnaire, guided and indepth interview, and sources such as official records, government officials and knowledgeable persons of the town.

The selection of this municipality for the study was made on the following criteria:

- (i) In terms of general demographic and socio-economic conditions, the township and its municipal government may be regarded as the representative institution of Bihar;
- (ii) This municipality has had sufficient exposure to administrative stresses and strains as a result of frequent supersession;
- (iii) The civic culture of this urban institution is not res-

pensive to public opinion and measures of reforms; and

- (iv) The author's long acquaintance with the area and local people helping him to establish the much needed rapport with the officials, municipal leaders and their followers. All these have weighed heavily in the favour of selecting this township as a unit of study.

POLITICAL PROCESS AND DECISION-MAKING

If we wish to have the local self-government, then the necessary requisites for its success requires to promote institutional development for making it self-sustaining, a problem solving institution in which the vital function and indeed the necessary condition for high level of civic services is the management of political process, *i.e.*, the recruitment of civic leaders with commitment and capability to promote civic improvement, the articulation of civic and allied political needs, the development and management of institutions, the reconciliation of various interests and resolution of conflicts. The success of the management lies in making the political process functional to the management of environmental improvement and urban development.

Without going into different details of political process, in short, for the present study, political process may be defined as a process or mechanism through which political systems are changed and maintained.

The emphasis on political management is based on additional consideration that the behaviour of bureaucracy is very much affected by its political as well as social environment. This is true whether there are elected councillors or not, because the officials are subject to political pressures from outside as well as inside. Political pressures may, of course, increase when the elected representatives are in command. In any case, the organisation of bureaucracy, the recruitment, the supervision and control of the staff, all these, to a large extent, depend on the nature and role of political leadership and surveillance. The underlying assumption is not one of autonomous bureaucracy independent and rational, but a bureaucracy that is bound to share the culture of politi-

cal process alongwith political leaders, indeed the policy decisions, the outcome of a continuous interaction and mutual influence between officials and leaders. Bureaucracy is an instrument of development which has to work under the command of political leadership. Any improvement in local-self government involves deeper political issues and which must, therefore, weigh upon sound and suitable leadership.

Any improvement in local self-government involves deeper political issues. The fundamental question pertains to the kind of political forces that dominate the decision-making process. The politics of decision-making, however, cannot be understood merely in terms of political or bureaucratic interests and its influence. Concept of civic welfare, concern for the public, clash of interests between various social and political groups and the ways conflicts of interests are resolved, reflect the economic state and social norms in local politics. Thus besides the formal organization of political and administrative institutions, the culture of politics as well as socio-economic conditions is a vital determinant of what an institution does and how could it do it.

As a part of political process, sometimes, local governments are marked by a collusion between some influential local leaders and officials. This collusion has been directed towards the heartless exploitation of local bodies for private and factional benefits. Thus, sometimes local bodies politics is characterised by egoistic political culture where individual leaders and officials acquire benefits.

Public ethics is the main issue in planned development which requires special attention in terms of active involvement of people in development process. At the same time, it also requires selfless work in the general interest of public on the part of the leaders of public opinion.

Decision-making is one of the important aspects of political process and the leadership at all levels of a political system. However, decision-making process at the grassroot level is something different from decision-making at the national and state levels. Owing to its highly localised orientation and lack of decision-making dynamism in leadership, it carries-

special significance so far as local political process is concerned.

In a sense local political process means exercising decision-making influence by the popular representatives, regarding issues which are likely to create general obligations for the citizens. Formerly, those powers were exercised by the officials who could claim expertise. The new political process aims at combining the popular elements with the ingredients of expertise in the final decisional products. However, the incorporation of popular elements is not without its problem of management. The differing views must be made explicit and integrated into a workable agreement; the expertise must be invited to supply the best advice at its command which must then be integrated in political solution. The leaders of public opinion might also react to the solution and might have something to convey which must again be reflected in the final decision.¹ Thus the kind of responsibility involved in making the decision in the new context is of much higher order. Unless people's representatives recognise this responsibility and exhibit dexterity in handling the various stages of complex process of decision making, there is real danger of deterioration of the quality of decisions which is bound to be reflected in the lower standards of performance.

THE DECISION-MAKERS

The characteristics of decision-makers need a separate treatment as it is a completely separate and independent aspect of the problem. It can be assumed that the characteristics of the decision-makers would be education, decisiveness, effectiveness, psychological traits of leadership, insight into the local and developmental problems, political awareness, etc. One could hypothesise that educational differences would be reflected in the degree, character and effectiveness of participation. The hypothesis that higher the level of education, greater the degree of participation in terms of frequency, initiative, elaboration and effectiveness may be true in differen-

¹Sugan Chand Jain, *Community Development and Panchayati Raj in India*, New Delhi, Allied Publishers, 1967, p. 313.

tiating those who possess a basic minimum from those who do not. But at the higher level, it may be intercepted by many other factors, such as feeling of involvement, heterogeneity of interest, individualism and the like. The income status and social status are likely to make the difference in terms of effectiveness of participation. The hypothesis about sex differences rests on firm grounds. Given the cultural climate, one could expect low degree of frequency, low degree of elaboration and, therefore, low degree of effectiveness of the women members. The occupational composition leaves doubt whether issues relating to the welfare of landless labourers or artisans would be initiated or vigorously passed. The previous experience would also affect quality and level of participation. Persons having longer experience in the higher tiers of local government and state services are likely to participate more effectively than inexperienced members. In this case also perhaps, differentiation would occur at a certain basic minimum level. Finally, two more hypotheses should be added, regarding the institutional position and the feeling of personal state. Institutionally, the chairman, vice-chairman, chairmen of different committees and prominent members of opposition group are expected to take the initiative, elaborate the issues and are listened to with greater attention than an ordinary member. Ultimately, the feeling of personal state will determine the vigour with which a member engages in initiating and pressing on and countering its challenge with whatever degree of influence he can command directly or indirectly. Personality factors would come in at different stages of role performance. In fact, the effectiveness of participation partly depends on the individual's perceptual field and interpretive habits. An analysis which characterises decision-makers in terms of bio-social factors only, misses the many more important issues like the character of issues, the personality aspects and the behaviour of members.²

Since the official members have been given right of participation without a right to vote, their activities are as much relevant in decision-making as those of non-official members.

²Sugan Chand Jain, *op. cit.*, pp. 314-15.

The former has the advantage of education, better income, better society, and even better social status. Closely related to this fact is that since the official members are in a position to oblige municipal leaders in different ways, their opinion is generally respected and honoured by the institutional leaders. And as such, the government officials often might cut across institutional factors.

Again, the cleavage of perspective possession of intimate knowledge about popular reaction, sensibility to the sources of technical advice, bearing of responsibility and the case of institutional relationships constitute vital ingredients of decision-making process.

Side by side these basic aspects of decision-making process, the role of informal leaders cannot be undermined or overlooked. As a matter of fact, at local level, the informal leaders are very much instrumental in decision-making process. To some extent, it would be correct to say that any formal decision to be taken at institutional level is taken before hand by the elders, elites and influentials of municipal area informally. Those who lost the formal institutional positions to their nearest winning rivals are also not the silent spectators. Due to their effective criticism of municipal affairs and pressure tactics, they very much influence decision-making at institutional level. However, the leaders of those two categories play their roles only in the background.

COUNCILLOR'S ROLE AND PARTICIPATION

Decision-making also involves an aspect of power structure, that is who influences whose actions in what ways.

From the point of view of analysis of members' role, the members can be divided into two broad categories namely: officials and non-officials. On the official side, the executive officer, the chief sanitary inspector, the sanitary inspectors and several other employees of higher rank can be mentioned. The non-official side includes chairman, vice-chairman, president, chairmen of different committees and municipal councillors. The President admits the motion and encourages free discussion and ensures equitable participation of mem-

bers. Safeguarding the interests of minorities, protecting the officials and articulating the feelings of non-officials, where the convention requires him to act in this manner, are his duties. He is responsible for keeping law and order and decorum in the meetings and regulating discussions in such a way that a sense of direction is maintained, that members are restrained from monopolising the discussions and abusing their privilege of free speech and that various views are expressed and integrated in such a way that a solution reflecting the genuine consensus of members emerges. Sometimes, the presiding officer himself presents the issues, initiates the discussion and replies the questions. He may participate in discussion himself although this might considerably tax his status of neutrality.

The present study reveals that the score of presiding officer in initiating and participating in discussion is the highest among all the non-official members at municipal level. This would seem to show that the presiding officer is the 'speaker' not in the nominal sense of the term but in the true sense. In municipal council's meeting, it was noticed that the presiding officer supported officials more than 70 per cent of the times showing that he did not shirk from the responsibility of protecting the officials against the unreasonable onslaughts of the non-officials and *vice-versa*. The percentage of free time when discussions were encouraged, was more than eighty. The percentage of disorderly meetings at municipal council was recorded 35; whereas it was 42 at committees level. One of the respondents observed that the number of disorderly meeting was very high in the previous municipal council. It is to be noted that the respondent who gave such remark was the leader of opposition group in the previous municipal council. The respective percentage of irregular proceedings was 29 per cent and 35 per cent at the council and committee level respectively. This shows that although as an initiator and a participant, the President no longer played passive role—the evidence would rather seem to point out that he has played a dominant role—he has not quite succeeded in his role as a guardian of law and order in maintaining a sense of

steady direction in the meetings.³

Among other non-official members separate mention must be made of J.K.P.-General Secretary DCC (I), J.J.-prominent leader of Janata Party and R.D.-the coopted lady member. Mr. J.K.P.'s and Mr. J.J.'s roles are like linkmen between the state government and municipal governments. They are supposed to explain the policies of the state government to the local bodies where they sit as members, moderate the discussions of the local bodies on the basis of their superior experience of politics and government, understand and help solve the difficulties of the local bodies through administrative, governmental, political and legislative actions. They also help by keeping the officials and non-officials in proper station by infusing a sense of responsibility. At the same time, they also act as fearless critics which requires great courage. Their presence is a source of prestige to the local body. Of course, they might equally inject partisan feelings and bring with them rivalries and faction spirit of state politics.⁴

According to the present study, J.K.P. moderated 40 per cent of the decisions of the municipal council in regard to development programmes. Again in regard to development policies his appriser role covered 35 per cent cases in municipal council. As an initiator and participant in the discussions, he played a role only next in importance to the president. As critic he was at the top. The record of his attendance in the meetings of the municipal council was also the highest. He himself said that he felt it was his duty to attend every meeting of the council and committee so that the developmental schemes should not be exploited for selfish ends. He further explained that by doing so he would be serving the community whom he represented, which would ultimately prepare the political ground for him in state politics. If the benefits of the development schemes percolate to the poorest of the municipal community through his sincere efforts, his

³The Executive Officer and the President of Municipal Council, in the course of an informal chat with the researcher, subscribed to this view.

⁴S.N. Mishra, *Pattern of Emerging Leadership in Rural India*, Associated Book Agency, Patna, 1977, Footnote, p. 184.

political ambitions would easily be fulfilled.⁵

He was of the opinion that most of the councillors had some sort of understanding with the municipal bureaucracy with the result that hardly any development project was completed. Most of the money and programmes are exploited by the affluent section of the municipal community in connivance with the councillors and municipal bureaucracy.

As compared to the active role of presiding Officer and J.K.P. in initiating the propositions and discussions between them, the ordinary members have played largely the roles of elaborators and secondary supporters. Their score on initiating and participating in the discussions has been very low. As critics and moderators, they played a role only next to the president, J.K.P. and J.J. in order of importance. At the committee level, they have participated more vigorously but the overall picture is that, except for half a dozen members, the rest constitute more or less a passive audiences. This has important implications for decision-making process. The incorporation of popular elements in decision-making which is a central objective of decentralisation measure is likely to be ineffective, if the participation of common members remains uneven as it is now.

The low score of the ordinary members in initiating the discussions may prove deceptive, if it is not correctly interpreted. Members participate in matters which concern themselves or their constituents in a substantive manner. Items regarding roads, location of facilities, construction of *sulabh sauchalya*, drains and community hall, installation of water tanks, health centres, community market, and construction projects for their wards, etc., are matters of direct concern and evoke response of the members. What handicaps the members most in effective participation, is this lack of ability or willingness to discuss matters at a higher plan of generalization, impersonality and remoteness from personal experience in terms of education and awareness. The government communications and development schemes, for example, were

⁵His sincere effort with regard to allround development of the municipal community and effective participation in municipal politics was appreciated by one and all with the result, that he was elected to the State Legislative Assembly in 1980 on congress (I) ticket with a handsome margin.

acted upon as if they were of little personal and direct consequences. A number of these communications were beyond the comprehension of the members. They were approved because there was hardly any possibility of their being modified through normal processes of representation of local opinion. The most disheartening feature of participation was noticed in regard to utilisation of grants-in-aid. Whatever grant was received by the state government was left at the mercy of chairman and the executive officer. However, some conscious and vocal councillors succeeded in utilising those grants for partisan ends. Lack of awareness and zeal to participate effectively on the part of majority of councillors was the greatest hurdle in the way of integrated development of the town.

As compared to council level, the secretarial support noticed at committees level was poorest. While at the council level, the agenda was prepared for over 80 per cent of the meetings, at the committee level, it was prepared only in 16 per cent of the total cases and circulated in much smaller number of cases. The minutes of the past meetings were read in over 65 per cent of meetings of council but this was hardly found to be a general practice in the committees. The committees' secretaries were available on the fixed days of meetings only. They prepared minutes then and there and obtained the signature of the presiding officers and the members present at the committees. On the basis of the above findings an impressionistic observation may be made that the members of the committees were not alive to their responsibility and hardly gave any serious thinking in the direction of integrated development of one of the oldest municipalities of Bihar. In western countries, particularly in England, any development project is discussed in detail at the committee level before, it is finally executed. It is sad to comment that hardly such thought is given at the committee level in our country, specially in Bihar.

As regards monitoring, presentation of action report was hardly a regular feature. The relative percentage of frequency with which reports were presented before the full meetings of the municipal council and committees were 45 per cent and 12 per cent respectively. Here again the committees were

seriously handicapped for want of information about follow up actions upon their decisions. So far as financial advice and advice regarding the manner of implementation was concerned the percentage noticed was very much discouraging. In this matter it was reported by some respondents that the Executive Officer, the municipal engineer and the municipal medical officer played the vital role. This may lead a student of Indian political system to conclude that even after 35 years of independence the subject culture has virtually eclipsed the citizens' culture so far as participation is concerned.

Connected to above statement, a question regarding members' role is the style of exercising such role. If it is exercised in a dominating manner it might leave less areas of choice for other members or less time for them to convey their views. In any case, it brings out the power element, *viz.*, who processes the decisive voice in decision making.⁶ And from this standpoint of J.K.P., they are the executive officer and the presiding officer.

After analysing the decision-making process and the role performance of officials and non-officials of the municipality under study, we find that all the hypotheses developed in this regard seem to be valid. On the basis of foregoing analysis it is noticed that the councillors and officials having better education, better social and economic status, high connections and having past experience in different capacities scored high on decisional front in comparison to those who lack all these ingredients of decision-makers.

It is disheartening to note that in the case of municipality under study neither the leaders of public opinion nor their followers have any knowledge of integrated urban development programmes. The councillors are so deeply involved in grinding their own that they hardly articulate the feeling of involvement in development schemes of their constituents. At the same time, due to their non-involvement, the general masses are not in a position to choose the development schemes which are of direct benefit. This could be articulated only when the masses were asked to participate freely in day to day civic affairs. What is desired is that on any

⁶See A.D. Losswell, *Politics: Who Gets When and How*.

matter of general interest, the public opinion is invited and the programmes discussed at the open forum. However, community participation should not amount to interference, rather their organisations and associations should be encouraged to participate in decision-making.

It is a common place knowledge that sharing of benefits of development schemes is the greatest incentive for the common masses to participate effectively in these schemes. So far it has been noticed that the benefits of these schemes have largely gone to the elite section of the society, leaving the poor masses in pitiable conditions. Once the poor masses test the benefits of these schemes, they will certainly try to participate in more effective manner. It is legitimate on the part of the politicians and community leaders that they should understand the implications of Integrated Urban Development Programmes and convince the masses about its usefulness and also seek their cooperation in the implementation of the integrated programmes. Once the benefits of these schemes percolate to the needy and weaker sections of the society, they certainly would be more responsive to development programmes and would effectively participate and cooperate in implementation and monitoring of the programme. □

PEOPLE'S PARTICIPATION, DEVELOPMENT ADMINISTRATION AND THE INTEGRATED URBAN DEVELOPMENT PROGRAMME

K.L. JULKA

Integrated development calls for planned 'intervention'¹ in the process of modernisation. The inexorable process of modernization affects all aspects of human life. In a developing country like India, experiencing simultaneity of changes rather than sequential ones, its inept handling is likely to put it out of gear. It is in view of urbanisation, pollution of environment, disturbance in ecological balance, spatial mobility, anonymity in metropolitan cities and helplessness in villages, homogenisation through the mass media and above all the increasing process of the state apparatus, that an interdisciplinary approach is needed to tackle the various dimensions of change. As for the development of 200 vibrant growth centres in India, this paper is concerned with the political dimension.

SIGNIFICANCE OF THE IDSMT PROGRAMME

It is gratifying to note that in pursuance of the objectives of all-round development laid down by the United Nations Conference of human Settlements (1976), the Government of India, in its Sixth Five Year Plan has, in view of the defects of sectoral development, laid accent on the integrated deve-

¹In contrast to technological and economic determinism, intervention signifies the making of critical choices in view of alternatives. For details, please see Rajni Kothari, *Footsteps into the Future*, New Delhi, Orient Longman Ltd., 1974, p. 129.

lopment of small and medium towns. The concentration of 45 per cent of the urban population in 14 metropolitan cities, according to the census of 1981, calls for arresting the flow of population to the metropolitan cities. With this objective in view and to start with, 200 small and medium towns have been selected and a sum of Rs. 200 crores (at the rate of Rs. 1 crore per town) has been allocated. These towns, having a population of below 1 lakh, will be developed as vibrant growth centres. The growth centres will be developed preferably, first in the towns of district headquarters, followed by sub-divisional headquarters and mandis. It is expected that these growth centres with planned urban settlement, economic viability and political administrative efficiency will not only result in improving the quality of life in their respective areas but will also spin off a process of social reconstruction in the rural hinterland as well.

NEED FOR PEOPLE'S PARTICIPATION

For the realisation of the above objectives, development administration has to be an effective instrument of change. Political leadership has to work with a missionary zeal. And above all, citizens have to keep vigil on civil servants and political executives. For this, people's political participation is called for. Long-term historical trends, western experience and the present disquieting scene of Indian politics point to the urgency of people's active participation.

As for the long-term historical trend, James Burnham points out that due to the increasing administrative and economic powers (because of nationalization) the possibility of the emergence of a managerial elite to offset the ideal of an egalitarian society is not ruled out. He contents that the managers "through the possession of privilege, powers and command of educational facilities will be able to control, within limits, the personnel of the managerial recruits; and the ruling class of managers will thus achieve a certain continuity from generation to generation".²

²James Burnham, *The Managerial Revolution*, New York, Penguin Books, 1945, p. 70.

As for the baneful effects of the emergence of a powerful political apparatus in highly industrialised societies, Herbert Marcuse observes: "The most advanced areas of industrial society exhibit throughout these two features; a trend towards consummation of technical rationality and intensive efforts to contain this trend with the established institutions. Here is the internal contradiction of this civilisation: the irrational element of its rationality."³ In order to forestall the dangers that can overtake us, people's participation is essential. The dangers pointed out by Marcuse are: want of individuation because of non-dimensional behaviour, containment of dissent and protest, interjection of values, etc.

A sad but perceptive commentary by Rajni Kothari on the quality of present leadership in India, deserves attention. Kothari observes: "Indeed we have a government that is fast losing control, in which regional chieftains are a law unto themselves and local *mafias* have replaced the party, and in which the people, especially the poor and the deprived among them...are suffering from not just growing economic insecurity and social disorder, but, in point of fact, a virtual reign of terror let loose by corrupt politicians and local *dadas* (often indistinguishable from each other), aided or abetted by police and para-military force."⁴

STRUCTURAL ARRANGEMENT FOR PEOPLE'S PARTICIPATION

Not only for forestalling the dangers of elitism and totalitarianism but also for redemption from our sorry state of affairs, a structural arrangement called People's Forum for Integrated Development is suggested. It should be based on territorial and functional (occupational) representation. By territorial representation is meant to have sector/wardwise representation. By functional representation of lawyers, doctors, engineers, businessmen, factory workers, farmers, etc. The

³Herbert Marcuse: *One Dimensional Man*, Great Britain, Sphero Books Ltd., 1970, p. 30.

⁴Rajni Kothari, 'Towards Intervention' in *Seminar*, New Delhi, January, 1982, p. 23.

purpose of such a structural arrangement is to solve community issues as well as groups' interests. This suggestion proceeds from the assumption that because of atomistic individualism of urban life, interest in community issues is evinced with less intensity. Mobilisation into the governmental process is induced when the programmes directly affect one's interest and a sense of efficacy prevails. A group's cohesion facilitates its members to articulate their interests effectively. Because of the communication among them related to common issues, the cognitive, affective and evaluative orientations of members of a group, despite their limited range, are expected to be conducive to active participation. Therefore, a structural arrangement designed to reconcile community issues with groups' interest can be a means of effective check on unscrupulous politicians and civil servants subservient to them. The People's Forum for Integrated development should be associated at the different stages of the programme: formulation, execution, monitoring and devaluation. It should be conceived in terms of a dynamic system of the interrelated and interdependent roles of political executives, civil servants and vigilant citizens.

DEEPER IMPLICATIONS OF THE STRUCTURAL ARRANGEMENT

The deeper implications of the Citizens' Forum for Integrated Development cannot be exaggerated. It should address itself to the task of political socialisation both manifest and latent. As for manifest socialisation, it should through deliberations and discussions, highlight our political values, policies, programmes and long-term objectives of the establishment of an egalitarian society. So far as latent political socialisation is concerned, it can by discouraging environmental pollution, encroachment on roads and parks, misuse of public property, indiscipline and nuisance at public places, etc., encourage attitudes which may subsequently issue into actions supportive of democracy. By honouring, rewarding and appreciating the services of those who really contribute to the growth of the town concerned, it can discourage the culture of political sycophancy that is gaining ground. The exposure of the villagers of the rural hinterland to the participatory

political culture of these growth centres will have a healthy influence on the functioning of democratic institutions in their areas. In a word, the function of political socialisation, if properly performed by the proposed structural arrangement, can go a long way towards state and nation-building. □

PARTICIPATION IN DEVELOPMENT: FUNCTIONS AND TECHNIQUES

VIJAY LAXAMI PANDIT

The question of evoking community participation to combat the ills of politics of development—whether urban or rural, raises many deeper issues like the involvement/non-involvement of people in the development process. In a democratic country like India, the success or failure of such institutions through which people can be involved in the programmes of development, has many facets of honest urge and manipulation of the higher groups to create an illusion in the minds of people to retain the *status quo* in social and economic life.

With the advent of industrialisation and rapid progress in technological advancements, there has been sudden development changes in agriculture, transportation and communication which have spurred the growth of towns and cities together with a gradual transformation of the political process within them. The growth of industrial culture and its process had a profound impact on the class composition, ethnic composition, the family size of urban mix including population of the town.

Initially, industrialisation attracted a large section of propertyless migrants to fill the labour force demand created by new urban-based economic enterprises. But the situation varies from town to town and as among cities *inter alia*. The bigger urban agglomerations are causing the break-down of the system itself. The rate of crime, the increasing incidence of violence and insecurity of life due to deterioration in law and order situation, scarcity of bare necessities, inadequacy of civic amenities for the masses, are some of the symptoms.

Apart from non-availability of the essential commodities to common man in cities, he has to face far greater hardships than ever before. Most of the time the people queue up in large numbers on a ration shop, milk booth, on bus-stop to satisfy their basic needs, but they get nothing except frustration most of the time, because of the disparity in accessibility to the public facilities or wanted commodities. In recent past, a great deal of violence in large cities as well as small towns has been directly or indirectly related to these problems of the masses. However, there is more tension and frustration among the people living in small town because of a large proportion of the population being below the poverty line.

POLITICAL CONSCIOUSNESS AND CIVIC AWARENESS

The degree of dissatisfaction amongst the population differs from town to town depending on the manner in which the local governments manage their affairs and involve people in the management of thier own affairs. Of course, effective management of civic affairs in a democratic country like India, calls for an effective participation and a sense of responsibility of citizenry in the development to bridge the gap between the well-to-do and the deprived strata of population who often live in two different regions of the small and medium towns.

The failure of the government to conduct civic affairs effectively may be due to several reasons. One such reason may be that the citizens are not conscious and lack civic awareness and thus neglect their responsibility. But the available evidence shows that on the one hand, there is a lack of direction and perspective among the citizens as how to participate in the development programme, and on the other hand, the ruling class or the higher level politician of this country, does not want to make the masses conscious in this direction because this consciousness may pose a great threat to the status quo of the ruling class.

The continuation of the present system and the pattern of government cannot ensure the development of towns. The level of political education and consciousness of the people, their zeal and ability to provide a living environment could

bring some structural changes in the system. The citizens' awareness and joint political action on their part are the important opportunities provided by democracy but there is vicious circle in today's democratic world because of the role of dominant classes and politicians in the process of development. There are social and economic inequalities and the citizens are alienated from the socio-economic and political institutions. It is also interesting to note that the groups which are most alienated are the ones who have the heaviest burden, work demand, and poorest educational resources. In such circumstances, the more seriously one talks of the democracy and the development either at local or at the national level, the more he feels the need and importance of the involvement of the citizens in such processes.

WHO ARE THE PEOPLE TO PARTICIPATE?

The citizens in any small or medium towns consists of three types of people: (i) those who have surplus food and money, (ii) those who manage to meet their ends, and (iii) those who are very poor and have their unmet needs. The first and the second groups do not feel any necessity to make changes in the system and they are not much concerned with the participation for local development. The third groups is unorganised and is unconscious of its role in development process but at the same time they can play an important role in the development. They can be organised and be made conscious of their rights and their roles.

For integrated development of small and medium size towns, the first step may be that the organised poor and lower middle class people can give a severe blow to the local bully and evil gentry, who by their economic domination are capturing higher social status but are not interested in any type of social reform. Sufficient interest has to be created amongst the people, because there may be resentment amongst the poor citizens. To have an idea of this, some sort of survey of activity and organisation is needed in order to turn public anger and distrust into positive action. When the people develop interest in such types of organisational work, this interest

could be mobilised and focused on an event, it may be development or something else.

GROUP DYNAMICS

The mass-citizen involvement calls for improved mass-communication facilities and mass-social communication system so that the organiser may have the capacity to reach the masses and could have even the group discussion with them. These dialogues can be recorded and can be reported with the expert information. The opportunities for inter-group or inter-person dialogue can be provided *via* group discussion. Radio, television, newspapers and other mass media can also be used for such exercises.

Group discussion as a problem solving involves: "(a) the statement of the problem, (b) the analysis of the problem, (c) the collection of relevant facts, (d) development of alternative solutions, (e) the consideration of available resources, and (f) the plan for action—*who* will do *what*, *when*, *how*"¹.

The poor may be included in positions within the community action agencies so that it may permit them to influence the objectives, policies, actions and organizations established for development. These people may be assisted to develop 'autonomous and self-managed' organisations which may be made competent to exert political influence on their own behalf and own self-interest.

One way of involving citizens' participation could be by providing assurance that at least no individual will reap most of the benefits in this regard. The trusted and honest organizers could also help to provide assurance that the benefits will be fairly distributed because the suspicion of the organizer's motives is one of the most common obstacles to the involvement of masses in any programme. The people should be sure that those who are guiding and organising them are able to exert influence on the authorities.

The aspirations which could involve citizens in the func-

¹William J. Cousins, *Group Discussion: A Handbook*, UNICEF, October 1978, p. 8.

tioning of the democracy of development at local and national level does not find a prominent place in the Constitution of India. The leaders of the nationalist movement were the leaders of the social movement also and they did not want radical changes to deviate from the colonial legacy even after independence. The backwardness was planted by the colonial state apparatus and the leadership could not root it out rapidly. The history of the government shows that the development could not take place because of political divisions between the rulers and the ruled which is rooted in socio-economic divisions of the society. The existing economic relations will not allow the masses to break the chains of poverty and socio-economic bondage, unless the values of the present system with their institutional base are changed and the socio-economic structure is radically transformed through mass movement, the talk of their development will become redundant.

FUNCTIONS AND TECHNIQUES OF PARTICIPATION

Although the tidy slogan of 'planning for the people' has been a part of the professional jargon of the planners, nothing is done for them. They get a very nominal or fringe benefit of the amount of resources spent. H.W. Eldredge has stated that "this is merely an extreme underlining of the new mood in urban planning, the somewhat belated recognition that far new cities, new people are necessary."² This is precisely pining for the mass movement and peoples' participation in decision-making process which could affect renewal and rehabilitation of their community life.

The rising concern for human welfare keeping the norms of equity with social justice, calls for community participation which includes first the unavoidable conflict for control between participants and the often technically trained personnel—the service givers or functionaries.

Judy B. Rosener has compiled a list of such 14 functions and 39 techniques and has cross tabulated them in order to

²H. Wentworth Eldredge (ed.), *Taming Megalopolis*, Vol. II, New York, 1967, p. 954.

determine which functions a technique will serve.³ The most important techniques determined by the number of functions that are served are as follows:

Charette: The assembly of interest group for intensive meetings.

Citizens' Advisory Committee: An ad hoc organisation of citizens to present the ideas of local groups.

Citizen Employment: The direct employment of client representatives.

Coordinator: Provides a focal point for citizen participation in a single individual.

Design-In: A technique in which citizens obtain a view of the effect of a plan or project on their own community.

Fish Bowl Planning: An open planning process in which all parties can express their views before a proposal is adopted.

Meeting-Community Sponsor: Organised to focus on a particular plan or project.

Open Door Policy: Encouragement of citizens to visit local project office without prior appointment.

Short Conference: Intensive meetings organised around a detailed agenda.

Workshops: Working sessions to discuss issues and to reach an understanding regarding its role in the planning process.

Assuming the importance of people's participation in the development of small and medium size towns in India, it may be emphasised here that the national government has to intervene in the urban areas on behalf of the poor and the powerless. The decision-making in our country is monopolised by the ruling class and bureaucrats who isolate the public from the system and its benefits.

The situation really looks paradoxical because the representative governments, instead of being responsible to

³Judy B. Rosner, "Citizen Participation: Tying Strategy to Function", in Patricia Marshall (ed.), *Citizen Participation, Community Development*, Washington, 1977.

the people who elect them, are the saviour of past legacy not bothering much for the interests of the people. Masses have little or no control over decisions which virtually affect their lives. The development of small and medium towns, therefore, requires an analysis of the relationship between the rulers and the ruled to invoke participation of the people which is very essential for development administration. □

ORGANISATION FOR PLAN ADMINISTRATION AND INTER-AGENCY COORDINATION

P.T. HARDIKAR

The scope of this paper is to be limited to the discussions regarding promotion of coordination between various authorities and development agencies involved in the implementation of plan. It is assumed that the selection of towns for integrated urban development project is proper and that the planning proposals have been properly formulated.

During the last three decades, and especially since the Second Five Year Plan, large number of development plans/master plans have been prepared. The attention, however, was concentrated more on preparation of these plans rather than on their implementation. The Zakaria Committee on "Augmentation of Financial Resources of Urban Local Bodies"—in its Report published in 1963, observed that "even where Master Plans exist, they are not being implemented". In Maharashtra, though almost all the municipal towns have had their statutory development plans by the end of Fifth Year Plan, the implementation of these plans was only marginal and was far too slow than it ought to have been. More attention was given to control and regulation of development rather than to the promotion of urban development by making positive action plans for the implementation of development plans. In 1975 Prof. Deva Raj observed that "by and large it seems that the implementation is marginal because of lack of appropriate legal tools, administrative machinery and financial budgeting on the basis of detail pro-

grammes and projects for integrated development".¹ Some beginning towards implementation of the proposals of development plans was initiated in Maharashtra since 1964, when the schemes for giving financial assistance to the municipal council for providing basic amenities and for implementation of proposals of the development plans were introduced at the state level. The amount provided for such assistance under the state level schemes was so nominal that it was not able to help the implementation of development plans to any appreciable extent. Subsequently, the unified scheme was transferred to the district level and efforts were made to prepare more detailed phased programmes for the implementation of development plans. The District Planning and Development Councils applied the selectivity criteria in order to obtain more and more funds for implementation of development plans.

Since 1975-76, many proposals of development plans were actually implemented and people began to feel the marginal benefits of such implementation. The scheme for giving financial assistance to municipal councils for implementation of their development plans indirectly made it necessary for the planners to start thinking in terms of actual implementation of the plan proposals. The central scheme, under the Fifth Five Year Plan for integrated urban development of metropolitan cities and other towns having a population of 3 lakhs and above was another landmark in giving new orientation to the urban development strategy. However, the number of metropolitan cities and towns with a population of over 3 lakhs, covered under the scheme was only a few. The present centrally sponsored scheme for integrated urban development small and medium towns can be credited with two main achievements. Firstly, it has initiated the implementation of development plans/master plans on such a large scale, perhaps for the first time, and secondly, due to the undertaking of such a programme, the planners have given serious thought to find the techniques and

¹Deva Raj, "City Development Plans and their Implementation", paper contributed at the Seminar on City Development Plans and their Implementation, organised by IIPA's Centre for Urban Studies, May, 1975, (Mimeo).

solutions for actual implementation of development plans/master plans and the problems involved in their implementation.

FUNCTIONAL URBAN SERVICES—A DIVISION OF LABOUR APPROACH

Urban development in itself is a complex process involving a large number of development activities necessary for improving the total environment of urban areas, each requiring equally large investments. Many of these activities are specialised and technical in nature and which, it is felt, can not be efficiently undertaken by normal staff of the municipal councils. In small towns, unit cost for providing utility services and facilities also tend to be high due to small scale of operation and low population densities. The fact combined with the lack of financial resources as well as of administrative and technical skills with the municipal councils has led to the transfer of certain responsibilities for the provision of some specific services to the state level agencies giving rise to various autonomous functional organisations. Thus the urban local governments, function-based organisations dealing with specific services, have also taken up the responsibility of providing urban services.

In view of these, functional fragmentations for the provision of utility services in urban areas by different autonomous functional organisations could be looked upon from the view point of the division of labour rather than as fragmentation of urban development functions. However, each organisation with its narrow functional base has remained more or less as an island in itself, losing site of original intention. Had the original intention of the division of labour been kept in view, perhaps the present problems of lack of coordination could have been atleast minimised, to some extent, if not eliminated altogether. Multiplicity of urban development authorities, without an effective institutional coordination in implementation of various development programmes has, therefore, become a basic problem. In short, the solution intended to solve the problem for the provision of urban utilities services has *per se* become a basic problem in

urban development. It has now almost become necessary to find out ways and means for achieving coordination among these various functional agencies in the interest of planned urban development.

CLEAR SPECIFICATION OF GOALS AND OBJECTIVES

The first step towards achieving effective coordination among the various autonomous authorities would be that the authorities concerned with urban development activities should have a clear understanding of the objectives of undertaking a particular activity of a project. If one has a clear idea of what he has to do and achieve by undertaking a particular activity, one can find out the alternate methods of achieving that particular objective in a right time and in a right manner. The various authorities concerned with the provision of urban service in general, have to understand clearly that their objective is to provide these services efficiently and timely and that they have to quickly respond to any shifts in demand to ensure satisfaction of their users. Similarly, if each organisation concerned with the implementation of integrated urban development programme clearly understands the objectives of the proposals of IDSMT plan, the problems of coordination can be minimised to some extent.

In most of the development plans or the integrated urban development projects there is general policy goal of improving the environmental and living conditions in urban areas. But such long range policy goals generally do not seem to have been further worked upon and concretised into well defined and more specific objectives in undertaking various development programmes. In many IDSMT programmes, the general policy goal of developing the town as a growth centre serving the surrounding region is stated. For the purpose of achieving this goal, the development programmes of small industrial estates, APMC yards/mandies or construction of shopping centres have been proposed mainly with a view to generate employment opportunities and to strengthen the economic base of the town. Similarly, residential area development projects have been proposed to be undertaken with a view to relieve the acute housing shortages and also to pro-

vide serviced sites to accommodate additional population migrating to the town. Likewise the traffic and transportation projects, involving the construction of new roads and widening of the existing roads have been proposed to be undertaken with the objective of relieving traffic congestion and improving traffic and transportation network of the town.

However, all these objectives have been hardly stated clearly and precisely in the IDSMT project reports or in the reports of the development plans/master plans. Although these objectives are implicit in undertaking of each development component of the project, clearly defined specific programmes and precise statements are lacking. This could have helped each authority or government department concerned with the execution of the project components to have a clear understanding of a particular activity or implementing a particular proposal. Such a clear understanding of the objective could have compelled the concerned authorities for taking timely action and making suitable adjustments, as and when necessary.

This point can be made more clear with reference to the important objective of improving and strengthening financial resources of municipal councils, which is often lost sight of at the time of actually implementing the projects. It is one of the main objectives of residential and industrial area development projects or construction of shopping centres, that the projects should yield a sizable return as a source of annual income to the municipal councils. If this objective is really understood by the concerned implementing agencies or persons involved, they will try to avoid delays in implementing the project by taking suitable alternative courses of action. For example, implementing authority may prefer to be liberal in paying compensation for the land or may accept the tender somewhat higher than the approved estimated cost, if it is likely to save a sizable amount in the cost of construction and ultimately the project cost of implementation. Thus if the agencies concerned with implementation of the project components have a clear understanding of the objectives, they will endeavour to take timely and coordinated action and thereby minimising the problems of coordination.

Moreover stating the objective more precisely in a compara-

tive or quantitative terms would also help in effective monitoring as well as in the evaluation of the project. One of the objectives of undertaking industrial area development project or development of a commercial complex is stated to be the generation of more employment opportunities. Further qualifying such objectives by stating the estimated increase in employment opportunities will help measuring the achievements and proper evaluation of the project.

Coordination in various activities implies that concerned activities have to be performed at a particular point of time which are linked to the time sequence of activity programme or project. The master plans/development plans contain planning proposals in terms of zoning, reservation of sites for public purposes, traffic and transportation, etc. Sometimes indicating phases in which these proposals may be implemented. Beyond this the master plans/development plans do not indicate any detailed programmes of implementation of such proposals. To be capable of implementation, a plan has to be a programme. Mere formulation of planning proposals without any detailed programme for implementation would not constitute a 'Plan', it would merely depict a picture of how a town would look like after the implementation of envisaged planning proposals.

The Zakaria Committee has recommended that "Every Master Plan should be translated in the Master programme consisting of number of specific schemes and each local body should prepare a Five Year City Development Programme in accordance with which various schemes in order of priority would be executed." It is thus necessary that the development plans integrated or otherwise should clearly indicate a detailed programme of action and scheduling of various activities to be undertaken for implementation. Such scheduling can be done by adopting network techniques showing the logical sequence of various activities as also the activities which can be taken up simultaneously so as to complete the project within a specified time. Such network would also help in the management of the project during its implementation. Without recourse to a network, it would be practically impossible to fairly measure the process of implementation of the project and to have effective monitoring during the

operation of the project. In many of the IDSMT projects, networks showing the sequence and scheduling of various activities is absent and hence it is really difficult to have an effective monitoring of the project. Because much network also gives an idea of the agencies/authorities involved in the implementation of the project as well as their timing of activities. Such an advance knowledge of the timing of activities to be taken would enable the concerned authorities to take timely action on their part towards implementation of the project, thereby minimising the problems of coordination. Many of the urban development projects, however, lack programme scheduling in detail in the form of a network. The fault, therefore, lies generally with the planners preparing the master plans/development plans or integrated projects rather than on the authorities concerned with implementation of the projects. Even in preparing such a detailed programme schedule, it would be desirable to involve various functional authorities or departments right from the beginning so that action programme is formulated with their consultation.

It would also be desirable to invite public participation either through the prominent citizens or through the voluntary organisations working in the town, right from the time of project formulation to ensure public cooperation in implementation of the project. It is also likely that some valuable suggestions would be made by the people who are likely to get benefits of the projects. Further, if the people have knowledge of the benefits of the projects they will in all probability accept the project which is an action plan and may also voluntarily come forward and cooperate with the implementation of the project. In some of the towns in Maharashtra, it has been observed that the people are coming forward to part with their lands required for implementation of the project mostly because they visualise the expected benefits from the successful implementation of the project. At some places, resistance to the implementation of the project was experienced in the initial stages. But as the project made some progress, people came forward and even surrendered their lands required for implementation of the project. Initially, resistance was mainly due to the fact that people

could not believe that project would be implemented and such a large investment would be made in the urban development activities in their town. The later cooperation can be mainly attributed to the understanding of the benefits of the project. Thus detailed programming and scheduling of the project and involvement of people and all the agencies concerned would help in minimising the problems of coordination in implementation of the project.

The other reason giving rise to the problems of coordination among various authorities can be attributed to the lack of mutual respect among various disciplines concerned with urban development. It is commonly experienced that the technicians do not generally have adequate respect for the administrators and the administrators also generally do not have respect for both the technical views as well as the technicians. Similar is the case with the economists and other social scientists. Further the administrators, technicians and the social scientists have very little respect for politicians and *vice versa* and all of them have very little respect for the common people, *i.e.*, the clientele group or user of the urban development activities.

The situation which exists with the individuals also exists with the government departments and autonomous authorities, on the one hand and the local government, on the other hand. The local government, (municipal council) is in fact a supreme authority for the local area and it should be considered as such because we have adopted the British style of relative local autonomy. Originally the local government was considered as training ground for management of the public affairs and it has enjoyed relative autonomy in local administration under the general control of the government, exercised through administrative rules and regulations including financial controls. The weak financial position of the municipal councils has also resulted into more controls with a view to curb wasteful expenditure which might arise as a result of local political control. Due to weak financial positions, the municipal councils cannot take decisions regarding investments required for urban development activities and have to depend on the state government or autonomous functional authorities. In many cases the effect of govern-

ment policies has also been to weaken local governments and to increase the degree of dependence on state governments. In view of the weak financial position, the lack of adequate administrative and technical skills and an increasing dependence of the municipal councils on state governments, the government departments and the autonomous functional authorities pay very little respect to the municipal councils.

The lack of sufficient administrative and technical skills with the local government, can be fairly attributed to the miserable conditions under which the local government officials have to work as compared to the officials employed with the autonomous bodies who are better paid, more secured and free from public pressures. If similar conditions can be created in local government services, similar competence as is observed in the autonomous authorities might be expected from the local government, and even local initiatives and responsibilities can be promoted. It may also be suggested that the state government may even consciously take a decision to put its able officials into local government administration for reasonable duration with a view to elevate the states and radically improve the ability and efficiency of local government. Developing and re-establishing mutual respect among the various disciplines as well as among the government would also result in considerably minimising the problems of coordination.

In order to achieve proper coordination in various activities concerning urban development, it is often advocated that all the authorities or agencies concerned with urban development activities may be brought under the umbrella of one super authority. Most of the autonomous authorities dealing with urban development activities are in existence since long and are well established in their respective fields. Their separate existence as autonomous bodies has, therefore, to be recognised instead of trying to merge them in one super authority. It is further considered that clear understanding of the objectives of undertaking various development proposals incorporated in the project, effective programming, scheduling and network of the project and mutual respect among various government departments, autonomous functional agencies and local governments concerned with the implementation.

of the project may bring about proper and effective coordination or at least minimise the points of friction to a considerable extent. The lack of all or any of the above three elements is bound to give rise to friction in management and lack of coordination irrespective of the fact as to whether the experts belonging to various disciplines and the authorities concerned are working under the control of one super authority or otherwise. Bringing them under one super authority will only shift the point of conflicts from inter-organisation to intra-organisation level.

MODEL ORGANISATION FRAMEWORK

The organisational set-up for implementation of the development plans/master plans or IDSMT projects will have to conform to the task to be performed by such organisation which will also vary from place to place according to circumstances obtaining at a particular place. In general, however, it is desirable that such an organisation responsible for implementation of integrated urban development projects should have: (i) Administrative wing, (ii) Engineering or Executive wing which can undertake construction of roads and buildings as also the provision of water supply and sewerage, (iii) Finance or accounts wing for financial management, and (iv) Planning wing for formulating the project including detailed programming and scheduling and also for suitably modifying the project whenever the necessity arises. According to the guidelines of the IDSMT scheme, it is also necessary to keep separate accounts of the project for which accounts wing should also be necessary. The duties of such accounts wing, however, shall not be only for maintaining the accounts but also for keeping watch on the financial flow and its management. Similarly, the planning wing may be entrusted with the work of not only formulating the planning proposals and detailed programming, scheduling and developing network for various activities of the project but also with the work of modifying the schedule (re-scheduling) as and when the situation so demands. This, however, would be only a broad pattern of organisational set-up that may be generally requir-

ed for implementation of the IDSMT project even though the number of personnel in each branch may be only a few. Such a set-up, however, is only a broad structure and may have to be changed from time to time, since any such set-up or institutional arrangement which may be most suitable or optimal at one time, is not likely to remain most suitable for long in view of the growth of population, changes in price levels and incomes as also changes in other circumstances including social and political.

The model organisation will usually work under the chief officer of a municipal council who has also to look after day-to-day affairs and maintenance of municipal services which in itself is not a small task. The nature of work involved in the management of a development project is obviously different from that of a routine functional and maintenance work. It would not, therefore, be desirable to entrust both these works at the same time to one person particularly who is already overburdened with day-to-day affairs of municipal council and routine maintenance work. The management of an urban development project is also a very responsible work and requires constant attention and a full time project manager. The task of project manager may include: (i) planning, scheduling and rescheduling, whenever necessary, (ii) allocation of works for plan execution, (iii) monitoring progress of the project and cost incurred, and (iv) advising the decision makers in regard to the modification of the project proposals and objectives, wherever necessary after analysing the situation actually existing on site during the operation of the project. The project manager is not only expected to get the work done as specified but is also required to see that the project is completed in the best possible manner in a right time and in the best interest of the development of an urban area. He should, therefore, have a thorough knowledge of the project, clear understanding of the objectives and should devise systematic processes to get through the project to reach the desired objectives. He should be able to motivate people to work for the objectives of the project and should also be able to visualise the conflicts, analyse their causes and reconcile the differences in the best interest of the project.

Further, time and cost estimates of the project are based on certain assumptions and the actual time schedule and costs incurred will vary many a time from such estimates of time and cost. It would, therefore, be necessary to make adjustments during the operation of the project to balance the time and cost in consonance with the objectives of the project. In order to do this, the project manager will have to be alert all the time during the operation of the project to promptly react to the situation. This is obviously an exacting task for which it would be necessary to have a separate and independent project manager. Since he has to thoroughly know the project objectives and the project itself, its planning and scheduling, he would be able to advise the decision makers about the modifications in the project proposals as well as the project objectives. He should be a person who is involved in the project right from its beginning. It would, therefore, be desirable that such a full-time project manager is either an administrator or a planner having essential qualities required for management of a project of urban development.

MONITORING, RESEARCH AND EVALUATION

Apart from the usual organisation, it would also be necessary to have a separate monitoring, research and evaluation wing. The task of such a wing will be mainly to review the progress of the project as against the project schedule or network and suggest corrective action well in time. Such monitoring and research wing should also have to be so equipped as to anticipate bottlenecks in the progress of the project which are likely to occur in the near future so that suitable corrective action could be taken care of well in time to obviate bottlenecks as far as possible. Such a monitoring wing should also be able to both review and evaluate the progress of the project during its operation as well as after its completion as against the objectives of the project. In order to effectively perform this function of evaluation such monitoring and research wing will have to adopt a suitable methodology and operational tools. In order to effect pro-

per coordination and controls, such monitoring and research wing is required to be placed in the organisational structure in such a way that it has access to the decision makers and the project manager on the one hand and on the other hand an access and cooperation from those who are actually carrying out the execution work of the project. It should be able to elicit the required information about the progress of the project work and the difficulties experienced during implementation. A monitoring wing, would thus act as a link between the project manager and the executive personnel carrying out the project. Such a monitoring, research and evaluation section should, in fact, be a vital and an integral part of the urban development management. It can also help in the policy formulation, evaluation of the project and making possible the best investment and management decisions to be taken at the right time. The periodical reports and analysis of the process of the project, difficulties encountered and their solutions and evaluation of the on-going and completed projects would also form an important document for providing guidance in project formulation and implementation of the future urban development projects.

The IDSMT projects which are expected to generate employment opportunities in the small towns might result in the creation of assets for the municipal councils, which could be looked upon as an opportunity for improving and strengthening the financial position of small and medium towns. With the strengthening of the financial position of the municipal councils, decisions regarding investments in urban development activities can be taken at the local level, *i.e.*, at the town level, rather than at the higher levels from where the budgeted funds for such investments might originate. Improvement in the financial resources of the municipal councils would thus result in reducing the dependence of the municipal councils. The improved financial resources and income generated from the implementation of the IDSMT projects can be further utilised for undertaking more and more urban development activities. The present centrally sponsored IDSMT scheme should, therefore, be looked upon as the beginning of the chain of integrated urban development pro-

jects ultimately leading to the implementation of the entire development plans/master plans for initiating the development of the town as an important growth centre in the region to take its right place in the national development process. ☐



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Appendix III

CENTRALLY SPONSORED SCHEME FOR INTEGRATED DEVELOPMENT OF SMALL AND MEDIUM TOWNS: GUIDELINES

INTRODUCTION

The Draft Plan 1978-83 lays emphasis on increasing the rate of growth of small and medium towns so as to enable them to act as growth and service centres for the rural hinterland and to reduce the rate of migration to metropolitan cities. It is proposed to do this by increased investments on the provision of infrastructure and other essential facilities. For proper development of these towns, it is necessary that an integrated development programme of each town is drawn up keeping in view its locational importance and linkages in the region. With this purpose in view, the centrally sponsored scheme for the development of small and medium towns has been introduced. It seeks to provide central loan assistance for selected items of development to the State Government/Union Territories on a matching basis so as to serve the integrated development of selected small and medium towns during this plan period.

COVERAGE

This centrally sponsored scheme for integrated development would cover small and medium towns with a population of 1 lakh and below, on the basis of 1971 census. In selecting the towns for support, preference would be given to district headquarter towns followed by sub-divisional towns, mandi towns, and other important growth centres. The district towns or sub-divisional towns, etc., selected for priority development should be such as will check the migra-

tion of rural population to the large cities and would perform the role of services and market centres to the rural hinterland in the context of the balanced development of the whole district and the region. Since it is not possible to cover all the towns conforming to the population criteria during this plan period, the selection of the town has to be done carefully with reference to the rate of growth of population, the growth of the district and the region and the investment taking place in the hinterland. Another important factor would be the linkage of employment generation with urban development and the capacity of the institutions responsible for urban development.

COMPONENTS

The project document prepared for the integrated development of the identified towns should include components for which the central assistance would be available on a matching basis and also those components for which funds would be met from the provisions in the state plans. Both types of components are indicated below:

- (a) *Components Eligible for central Assistance on Matching Basis*
 - (i) Land acquisition and development. Residential schemes will include sites and services with or without core housing.
 - (ii) Traffic and transportation to subserve the shelter and employment projects will include construction of roads and improvement/upgradation of existing road but will not include purchase of motor vehicles.
 - (iii) Development of mandis/markets, provision of industrial estates, provision of other service and processing facilities for the benefit of agricultural and rural development in the hinterland.
- (b) *Components for which funds are to be found from State Plans, but which must form part of the Integrated Scheme.*
 - (iv) Slum improvement/upgradation, urban renewal and small scale employment generation activity.

- (v) Low cost schemes of water supply, sewerage, drainage and sanitation.
- (vi) Preventive medical facilities/health care.
- (vii) Parks and playgrounds.
- (viii) Assistance for the purpose of making modifications, wherever necessary, in city master plans to permit mixed land use.

STANDARDS OR NORMS

Because of the limited resources available in every one of these components, there should be an intensive effort to lower the standards so as to maximise coverage. The standards should also relate to the size of the urban settlement, nature of services to be provided and population trends, and should be capable of being incrementally built up as the resource position improves and paying capacity of the beneficiaries increases.

- (i) Water supply, where the existing norm of 40-60 gallons per head per day should be reduced to 15-20 gallons.
- (ii) Health service, where expensive plans should give way to simple preventive medicine and environmental hygiene programmes.
- (iii) Housing, where the bulk of the money should go into site and services projects, for the predominantly lower income categories.

PLANNING, IMPLEMENTATION AND COORDINATION

The State Government should identify the agency/agencies to prepare and implement the programme. The work may be coordinated by the Departments of the State Government or the State level agencies like the State Town Planning Departments, Housing Board, Slum Improvement Board, P.W.D. The Local bodies of the town should be encouraged and assisted to participate in the preparation and implementation of the integrated programme. Institutional arrangements for project formulation, execution and monitoring should be

encouraged and assisted to participate in the preparation and in implementation of the integrated programme. Institutional arrangements for project formulation, execution and monitoring should be well defined and established so that the funds are properly utilised and create a significant impact on the living and physical conditions of the selected towns.

The organisational set-up of the local implementing agencies particularly their administrative and financial wings should be adequately strengthened and their procedure streamlined for efficient implementation of the programme. In particular, the implementing agencies should have adequate powers delegated to them for sanction of estimates and for prompt implementation of the programme by eliminating procedural delays.

An effective machinery for coordination, monitoring and evaluation of the programmes should be set up by the State Government at the town level under the collector and at the state level preferably under the Chief Secretary or Development Commissioner. The machinery at the State level should be responsible for the formulation of the plan frame, to give general policy direction, review the progress regularly and generally take all steps including timely flow of funds and other resources for the implementation of the programme according to schedule.

The State Government should arrange to ensure proper maintenance of the infrastructure and other facilities created. Adequate provision in the budget of the agencies responsible for maintenance will have to be made annually.

BUDGETARY ARRANGEMENTS AND CENTRAL ASSISTANCE

Central assistance will be provided in the form of loan to the extent of 50 per cent of the cost of the projects in suitable instalments for the items mentioned in para 3 (a) provided matching assistance is made by the state government and/or implementing agency. Total financial provision including centre's share for the programme should find a place in the budget of the implementing agencies and the State Government. What is crucial here is that a capital budget for specific urban development programmes in a state should be pre-

pared to pool all the sectoral funds available for expenditure in the approved urban plan, year by year. The funds provided for the various components of the approved project should not be diverted to other schemes.

The State Government should ensure and certify that the central assistance claimed from the scheme of integrated development is for those components for which assistance has not been claimed from any other central source including public undertakings. The state government should forward to the Central Government every half year (as on 31st March and 30th September) progress statements in physical and financial terms and containing a report on the targets and achievements for each component of the programme and indicating further central assistance required. The next instalment will ordinarily be released after the receipt of certificate from the State Government regarding the utilisation of previous instalment in the enclosed form and after appraisal of the physical progress achieved during the period under review.

Central financial assistance will be given to the State Governments as loan and they will be responsible for proper utilisation of the assistance on the sanctioned programmes and for timely repayment of interest and principal. The loan will carry a rate of interest of 5.5 per cent or as revised from time to time by the Government of India subject to a rebate of $\frac{1}{4}$ per cent for timely payment of principal and interest. It would be repayable in 25 years including a moratorium of five years. The Central assistance should be passed on to the implementing agencies on the same terms as are applicable to the central loan. The state government's matching contribution should be passed on to the implementing agencies in the form of a loan or grant according to the standard terms. On the basis of the approved schemes received from the state government in time and the progress of ongoing schemes, the central government would indicate the likely allocation of assistance in each annual plan.

The release of financial assistance for individual programme will be made on the basis of receipt of satisfactory reports on physical achievements according to the target fixed and utilisation certificates of funds from the concerned departments countersigned by the Finance Secretary of the State. The

penultimate instalment for the relevant financial year will be released for a particular project only on receipt of utilisation certificates issued by the Accountant General for the completed accounts relating to the previous financial year.

CONDITIONS OF ASSISTANCE

The following further conditions will apply for central assistance.

1. The state governments should have an integrated plan for the development of town preferably based on a long-term Master Plan/Development Plan.
2. The state governments may consider passing a comprehensive town and country planning Act providing for preparation and statutory approval of the Master Plan and land use control.
3. The financial assistance is conditioned on the ability of the agencies to maintain assets and facilities created and their ability to repay the loans. This will require a detailed financial and institutional plan for municipal finances and its adoption and implementation in phases and for adequate mobilisation of local resources.
4. In view of the fact that proper formulation, execution and monitoring of the schemes under this programme require properly trained municipal personnel, *it is necessary to equip the staff employed in the implementing agencies and the municipalities with adequate training and expertise.* The state governments should undertake to get the concerned planning and executing staff of the local bodies trained in the regional centre of training in municipal administration under this ministry or in any other suitable training organisation before the project is sanctioned by the Government of India.
5. An appropriate urban land policy should be followed by the state governments to provide for the mopping up of unearned income accruing to private parties as a result of the development programmes and generally

- to tap the resource potential of valuable urban land.
6. Separate accounts should be maintained by each executing agency in respect of the components of the programme entrusted to it for implementation. The accounts should indicate the return also in respect of land acquisition and development projects and other remunerative schemes.
 7. If, for any reason, any specific project forming part of the integrated scheme of small and medium town is not completed during the period of availability of funds from the Government of India under the scheme, the State Government should undertake to complete the projects by making provision for funds from the State budget.
 8. Periodical inspection of the projects sanctioned would be undertaken by officers of the Government of India.

PATTERN OF FINANCING

The projects would be primarily financed by the internal resources of the implementing authorities and the resources provided by the state governments. *The Central assistance is intended only to supplement and strengthen the resources of the implementing agencies and those provided by the State Government.* The State Government should promptly pass on the Central assistance preferably within a month on the same terms and conditions to the implementing agencies. They should also create a suitable budgetary head with a token provision wherever necessary.

PROJECT REPORT

A project report for each town should be prepared and 3 copies of the report should be forwarded to the Ministry of Works and Housing, Government of India. It should contain the following chapter:

- (i) An introduction to the town containing relevant information such as its location, size, population, growth rate, employment and income of the population.

existing functions and its role in relation to the region, state or national economy supported by statistical tables. For this purpose, information should be furnished in the questionnaire attached. Last 2-3 years' abridged budgets of the local bodies operating in the town indicating the main heads of receipts and expenditure.

- (ii) Existing shortages in services and facilities and the norms or standards adopted to measure the shortages. Justification for the norms adopted should be given.
- (iii) The detailed programme should show its components, basis for the selection of the components, the period covered by the programme and its annual phasing. The programme components could include permissible and essential items like technical assistance and physical and price contingencies.
- (iv) An estimate of the resources (total and annual) required for each component, the basis and justification for the estimates and the proposed sources of the funds such as State budgets, Central assistance, resources of the implementing agencies, institutional borrowings, etc. The estimates should indicate the unit costs (e.g., land acquisition rate per hectare) where relevant. Information on the extent of mobilisation of the local resources should, in particular, be given showing the collections on the basis of existing rates and taxes, and proposals for their enhancement as well as new levies. A summary of the project cost should be prepared in the proforma attached to these guidelines.
- (v) Implementing agencies for each component of the programme, their constitution, functions and the capability for implementation and measures for strengthening their capability and for streamlining their procedures of work.

**PROFORMA TO BE FILLED UP FOR THE TOWN
TO BE ASSISTED UNDER THE CENTRALLY
SPONSORED SCHEME OF INTEGRATED
DEVELOPMENT OF SMALL AND
MEDIUM TOWNS**

1. Name of Town _____ District _____ State _____

2. *Administrative Status*

2.1 Hierarchy in District Admn.

District Office/
Tehsil Office/
Taluka Office/
Block Office/
Other

2.2 Please state what other Government Offices are located in the town.

2.3 Type of local Government with year of establishment

Municipality/
Town Area Com./
Notified Area
Com./Panchayat/
Nagar Panchayat

3. *Location* (Please supply a map of the town)

3.1 If situated on a State/National Highway—name of the Highway—If not, distance to such a Highway

3.2 Give the name of the nearest important town or city and the distance to it.

3.3 (i) Name other towns within a ten miles radius.

(ii) Indicate number of villages served by the town or from which people visit the town for social and economic reasons.

4. *Transport and Communications*

- 4.1 Name the roads or tracks that connect the town to the surrounding areas and the means of transport generally used for travel to and from the town.

<i>Road or Track</i>	<i>Kutchha Metalled or tarred</i>	<i>Means of Transport in use</i>	<i>Frequency of number of such vehicles</i>
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- 4.2 Name of river/water way/lake, etc., close by. Is it used for transport/irrigation/bathing and washing/source of drinking water supply.

- 4.3 Has the town a Railway Station Name—If yes—

- (i) Is it on main line/branch line
 (ii) Broadgauge/metregauge
 (iii) Frequency of trains in 24 hrs.—goods passenger

If not—

- (i) The nearest Railway Station.
 (ii) whether connected by Kutchha/Pucca Roads and the distance to it.

(iii) Is it used substantially for goods and passenger traffic.

4.4 Has the town a Bus Stand—

If yes, the frequency of bus service—

If not, the nearest available bus stand and the distance to it.

4.5 If the town is served by telephone?

If yes, number of telephone connections.

4.6 (i) Give the number of post offices in the town—

Frequency of postal delivery

Frequency of mail clearance

(ii) Give the number of telegraph offices

4.7 Give names of the daily newspapers usually available in the town with the language.

4.8 Give the number of Radio sets—

T.V. Sets—

registered at the local Post Office.

5. *Industry*

5.1 Is there an Industrial Estate in or close to the town

If yes, please give location—
within or outside municipal limits.

Year of establishment—

Number of plots—

Number of units established—

5.2 Please give a list of industrial units/workshops in the town in the following form:

<i>Name of Estab- lishment</i>	<i>Items produ- ced or services given</i>	<i>Average daily employ- ment</i>	<i>Size of electric power connec- tion</i>	<i>Other source of power</i>	<i>Source of raw material</i>
<i>Within local body jurisdiction</i>					
1.					
2.					
3.					
<i>Outside</i>					
1.					
2.					

5.3 Do employees stay in the town or commute from adjoining areas—
If they come from outside the town limits, please give—

- (i) approximate percentage to total employees
- (ii) places from where they come with distance
- (iii) usual mode of travel.

5.4 Please indicate main problems that inhibit the growth of industrial units—

- Supply of labour skilled/unskilled
- Raw material
- Transport and communication shortfall

- Finance
- Marketing

6. *Electric Supply*

6.1 Please indicate source of electric supply—Local/State Electricity Board.

Is there a local sub-station
if yes capacity

6.2 Number of Electric connection.

1. Light and Fans
2. Industrial and Powers

6.3 Existing rates of electricity tariff

7. *Trade and Commerce*

7.1 Is there a mandi established—
If yes

- (i) Date of establishment
- (ii) Location within or outside municipal limits
- (iii) Number of shops
- (iv) Total area
- (v) Type of produce with quantity handled each season

7.2 Municipal Markets, if any—

Number of Markets
Number of shops
Number of temporary lettings

7.3 Number of shops in the town

7.4 Principal items of trade in the town and approximate turnover.

7.5 Trade links with—number of villages.

Name of towns.

SPECIMEN FORM

PROJECT COST SUMMARY

(Please see para 9(iv) of the Guidelines) Information upto Col. 4 only is to be given)

Project Component as prescribed in para 3(a) & 3(b) of the guidelines	Implementation agencies illustrative only	Cost of Completion	Outlay For 1979-80	Actual Expenditure in 79-80 quarterly	Total Expenditure	
					1979-80	1980-81 in quarterly
(1)	(2)	(3)	(4)	(5)	(6)	(7)
				I II III IV	I II III IV	

A. Components eligible for central assistance on matching basic

- (i) Land acquisition & development (including site & services) PWD, etc.
- (a) Levelling & Dressing
- (b) Survey and demarkation
- (c) Roads and paths
- (d) Water Supply and Sewerage
- (e) Drainage
- (f) Street Lighting
- (g) Horticulture
- (ii) Traffic and transportation facilities PWD, etc.
- (a) New Roads
- (b) Widening of roads
- (c) Grade Separators

(d) Construction of Depots	
(e) Terminals	
(f) Any other	
(iii) Development of Mandis, Markets etc.	Agri. Market Committee
<i>B. Components for which funds are to be found from the State Plans</i>	
(iv) Slum Improvement	Slum Board
(v) Water Supply and Sewerage	
(a) Supply of Service Meters	
(b) Supply of Pipes & Fittings	PHE Deptt.
(c) Supply of Distribution Values	
(d) Installation of Meters	
(e) Installation of Values	
<i>Sewerage</i>	--do--
(f) Supply of Pipes & Fittings	
(g) Supply of Cleaning equipment	
(vi) Park & Playgrounds	Social Welfare Deptt.
(vii) Preventive Medical Facilities/health care	T & CP Deptt.
(viii) Assistance for modifications in city master plans.	

NOTE: This proforma should contain the various components as given in para 3.1 (a) and (b) of the guidelines. The sub-heads of each component as given under Water Supply, Sewerage and Roads and Traffic Improvement are only illustrative. Actual sub-heads as per the programme have to be indicated.

(To be furnished in Triplicate)

CERTIFICATE

1. Certified that the central assistance (loan) of Rs.....
..... lakhs released in the year.....for execution
of projects under the Integrated Urban Development
Programme of.....(name of the city/town)
has been utilised in full and for the purpose for which
it was intended.
2. Also certified that matching contributions have been
made by the state government and the implementing
agency(ies) for execution of the centrally assisted pro-
jects as per the central government's sanction letter.
3. Further certified that the central loan was passed on
to the implementing agency(ies) at the same rate of
interest and on the same terms and conditions as pres-
cribed in the central government's sanction letter.

()

Secretary to Government of.....
..... Deptt.

Date.....

Countersigned :

Secretary to the
Government of.....
Finance Department.

